

START

Microfilmed 1991

State Library of Florida
Tallahassee, Florida

as part of the
SOLINET/ASERL Cooperative
Preservation Microfilming Project

Funded in part by
the National Endowment for the Humanities

Reproductions may not be made without permission from
the State Library of Florida

**THIS MATERIAL
MAY BE
PROTECTED BY
COPYRIGHT LAW
(TITLE 17, U.S.
CODE)**

SOL
MN01236.08
FBA

Florida. Commissioner

Florida: its climate, soil

[New York]: Fisher & Field

1870

Bibliographic Record Target

SOL MNO 1236.08 FBA

OLUC TI "FLORIDA ITS CLIMATE SOIL AND PRODUCTIONS WITH A Record 5 of 11
HELD BY FBA - 9 OTHER HOLDINGS

OCLC: 1700164 Rec stat: n
Entered: 19751014 Replaced: 19900419 Used: 19910313
Type: a Bib lvl: m Source: Lang: eng
Repr: Enc lvl: I Conf pub: 0 Ctry: nyu
Indx: 0 Mod rec: Govt pub: Cont:
Desc: Int lvl: Festschr: 0 Illus: ab
M/F/B: 10 Dat tp: s Dates: 1870.

1 010 01-6892
2 040 DLC c FUG
3 035 c
4 050 F316 b .F63
5 092 b
6 049 FBAA
7 110 10 Florida. b Commissioner of lands and immigration.
8 245 10 Florida: its climate, soil and productions, b with a sketch of
its history, natural features and social condition. A manual of reliable
information concerning the resources of the state and the inducements which it
offers to those seeking new homes. c Published for the state by J.S. Adams,
commissioner of immigration.

SYNC14-OLUPRISM IL IL IL
Search Edit View Actions Options
End of record displayed.

SID: 14677 OL IL

OLUC TI "FLORIDA ITS CLIMATE SOIL AND PRODUCTIONS WITH A Record 5 of 11
HELD BY FBA - 9 OTHER HOLDINGS

9 260 0 [New York, b Printed by Fisher & Field] c 1870.
10 300 69 p. b front. (fold. map) illus., pl. c 23cm.
11 651 0 Florida.
12 700 10 Adams, John Sullivan. c 1820-1876.

Technical Microfilm Data

Microfilmed by
REMAC Information Corporation
Gaithersburg, MD

on behalf of
SOLINET/ASERL
Atlanta, GA

Film Size: 35mm Microfilm

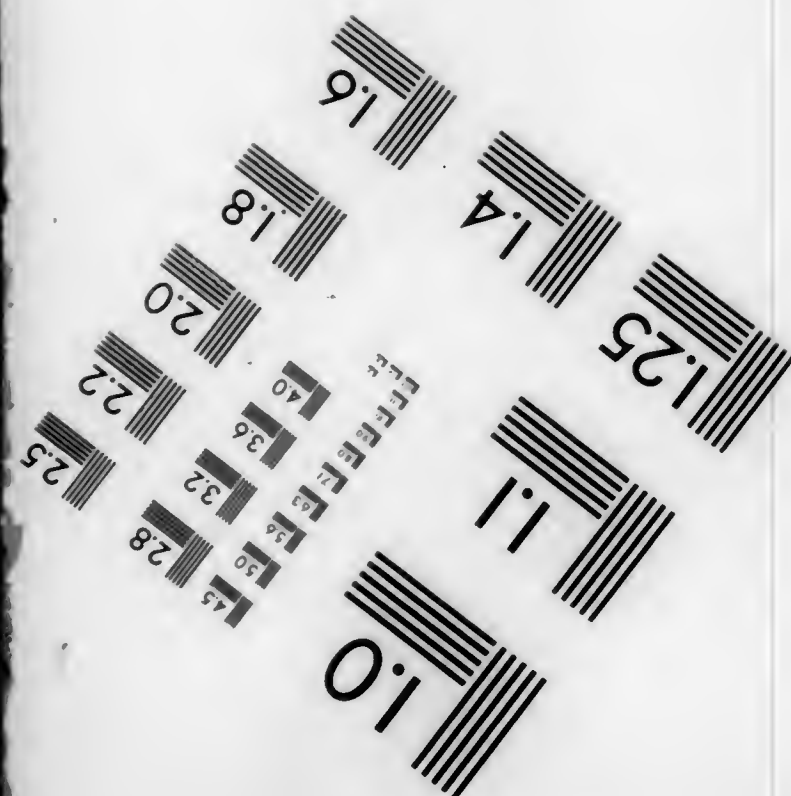
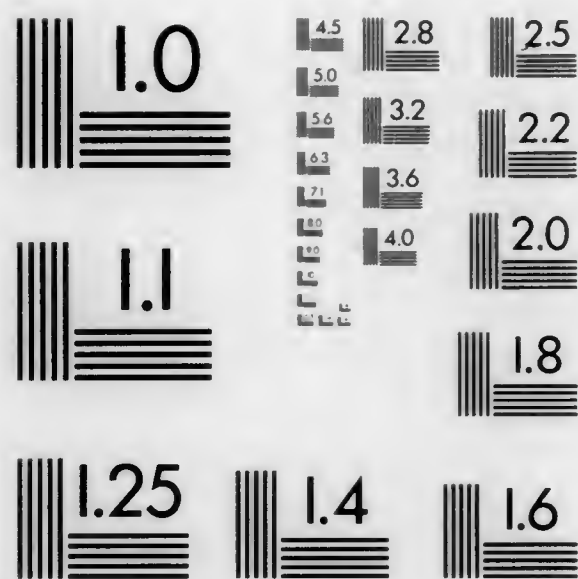
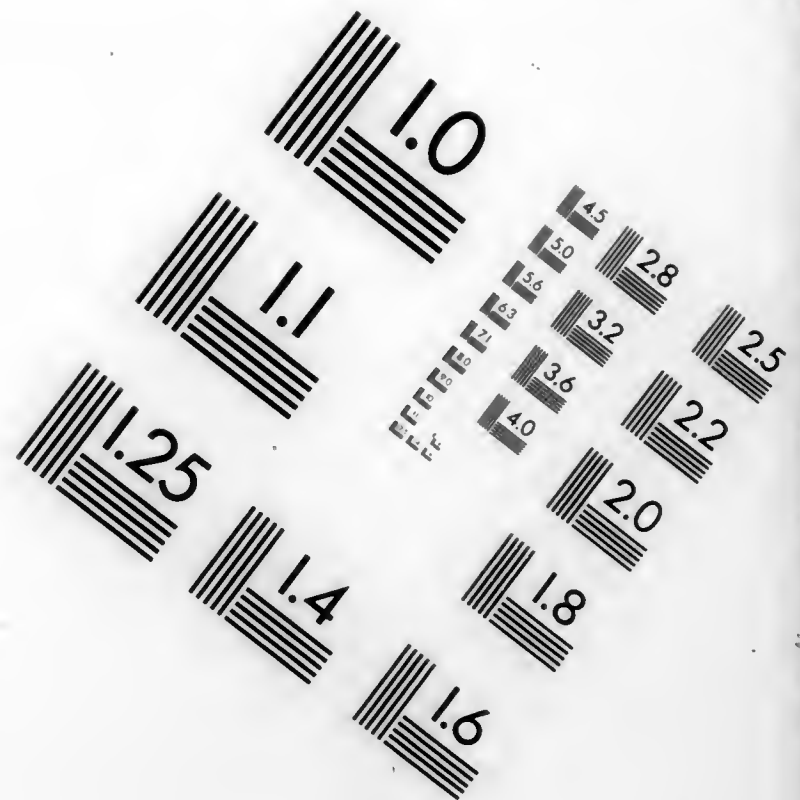
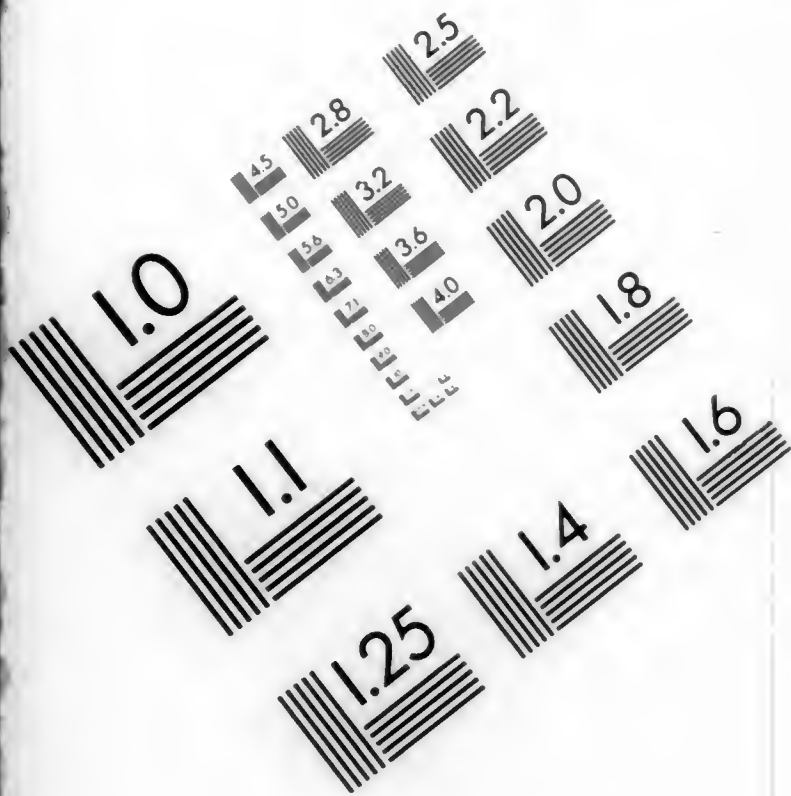
Reduction Ratio: 12 X

Image Placement: IA IIA IB IIB

Date Filming Began: 12-17-91

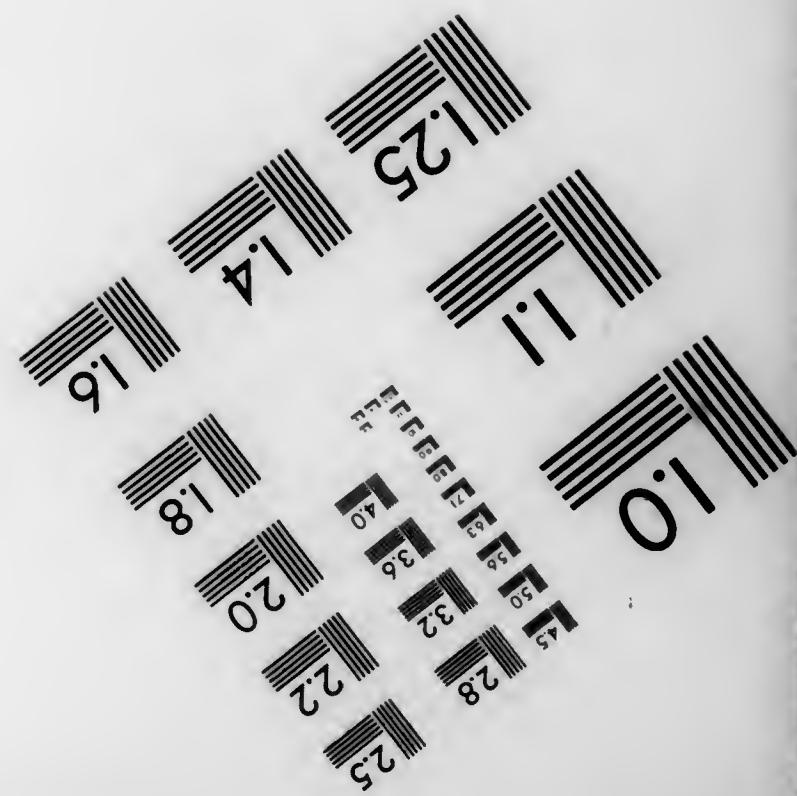
Camera Operator: *DMG*

IMAGE EVALUATION TEST TARGET (MT-3)



APPLIED IMAGE
1653 E. MAIN STREET
ROCHESTER, NY 14609
TEL (716) 482-0300
FAX (716) 288-5989

Precision **IMAGE** Products & Services



From
Stamfield
to - F. Chamberlain
FLORIDA:

ITS

CLIMATE, SOIL AND PRODUCTIONS,

WITH A SKETCH OF ITS

History, Natural Features and Social Condition.

A M A N U A L

OF RELIABLE INFORMATION CONCERNING THE RESOURCES
OF THE STATE AND THE INDUCEMENTS
WHICH IT OFFERS

TO

THOSE SEEKING NEW HOMES.

PUBLISHED FOR THE STATE BY
J. S. ADAMS, COMMISSIONER OF IMMIGRATION.

1870.

THE
FLORIDA IMPROVEMENT CO.

INCORPORATED UNDER THE LAWS OF NEW YORK.

1869.

Office—No. 3 ROSS' BLOCK, BAY ST., JACKSONVILLE, FLORIDA.

" 62 BROADWAY, (Room 15,) P. O. BOX 5238, NEW YORK.

OFFICERS:

CHARLES W. GODARD,	PRESIDENT.
JOHN J. MERRITT,	VICE PRESIDENT.
GREGORY SATTERLEE,	TREASURER.
GEO. W. BENSON,	SECRETARY.

BOARD OF TRUSTEES:

CHARLES W. GODARD,	JOHN J. MERRITT,
D. D. T. MOORE,	N. MICKLES,
ED. REIMANN,	JAMES W. FOWLER,
W. A. SHEPARD,	J. A. FOSTER,
GREGORY SATTERLEE,	EDWIN A. STUDWELL,
CHARLES W. WHITE.	

An Assistant Commissioner of Immigration for the State of Florida
may be found at the New York Office of the Florida Improve-
ment Company, where persons, who desire to settle in
Florida, may obtain additional information and
Low Rates of Passage.



VIEW OF JACKSONVILLE, FLORIDA.



FLORIDA:

ITS

CLIMATE, SOIL AND PRODUCTIONS,

WITH A SKETCH OF ITS

History, Natural Features and Social Condition.

A MANUAL

OF RELIABLE INFORMATION CONCERNING THE RESOURCES
OF THE STATE AND THE INDUCEMENTS
WHICH IT OFFERS

TO

THOSE SEEKING NEW HOMES.

PUBLISHED FOR THE STATE BY

J. S. ADAMS, COMMISSIONER OF IMMIGRATION.

1870.

Fla
1859
1876

752-49
Gardner
45.00

Entered according to Act of Congress, in the year 1870, by
THE COMMISSIONER OF IMMIGRATION OF THE STATE OF FLORIDA,
In the Clerk's Office of the District Court of the United States for the Southern District of New York.

Stereotyped and Printed by
FISHER & FIELD,
19 Chatham St., New York.

INTRODUCTION.

The genial climate, variety of productions, sparseness of settlement, and consequent cheapness of land in the Southern States, has arrested the attention of thousands in foreign lands and in the Northern States of our own country; and the immense tide of emigration, which, for the last quarter of a century, has flowed so steadily and powerfully towards the "Great West," is destined in the future to change its direction, and flow as rapidly and steadily towards the Southern States, if the proper means are used to spread abroad accurate knowledge of the actual inducements that are offered to settlers.

In order to draw to themselves as large a portion of this immigration as possible, most of the Western and Southern States have established, or are about to establish, departments of their Governments, to which the special charge of this matter of immigration is committed.

Florida has followed in this matter the promptings of her own good sense and the example of other States.

She has entrusted the oversight and promotion of immigration to a special officer, styled the Commissioner of Immigration, has made such officer a member of the Governor's Cabinet, and empowered him to establish a "Bureau of Immigration, for the purpose of furnishing information, and for the encouragement of immigration."

It is in the interest of this department that, as the Constitution directs, this book is prepared "for the furnishing information, and for the encouragement of immigration."

The design is, within comparatively narrow limits, to give as complete a knowledge as is possible of the general characteristics of the State, in regard to its topography, climate, soil, productions and condition, political and social; and, in short, to answer, as fully as possible, all those manifold questions that would naturally arise in the mind of a sensible man who has in mind the intention of settling in the State. And as confirmatory of such general statements, local information has been solicited from intelligent and judicious men in every section of the State.

All exaggeration and fancy coloring, which are the occasional characteristics of some of the many publications of this nature, will be carefully avoided. No effort will be spared to make the statements of fact herein contained perfectly reliable. The exact truth will be sought and presented. The most authentic sources of information will be applied to, and not an assertion of fact made that cannot be verified by evidence; and special care will be exercised that no section or county of the State be noticed at the expense of others, but that a fair, truthful and impartial representation of the capacity and desirability of each portion be made.

It was accordingly suggested in the Annual Report of the Commissioner, that it might be advisable to relieve the State of a portion of the expense of future necessary publications, by allowing individuals to make the necessary publications, under the supervision of this office, to secure requisite accuracy and reliability, with permission for the insertion of business notices, to assist in defraying the cost of publication. The plan thus suggested it is now proposed to carry out, or at least to attain the same results by some similar means. The matter forming the first part of the pamphlet—which was prepared for the State, and which constitutes a careful and reliable general description of the State, its character, climate, soil and productions—will be revised, corrected and amended, and will form the first part of the proposed book. To this will be added—more particularly for the benefit of individuals who, having determined upon immigration to Florida, such special information to determine their choice of locations—a more full and detailed account of different sections of the State, with their peculiar adaptations to particular crops, and the opportunities thus offered for the special prosecution of various enterprises. The complete book will also contain a map of the State, and matter of interest to strangers and transient travelers, serving as a handbook or guide to the objects of special interest in different parts of the State. Matters of a statistical nature, an official directory, and agricultural and horticultural items, will be added, that will make the book of interest to our own citizens, and induce a general demand for home supply.

The first part will also be published by itself in pamphlet form, for the use of this Department, for circulation in large quantities, gratuitously; while the entire book will be furnished to those who desire it, at a moderate price, sufficient to defray at least part of the expense caused to the State by gratuitous distribution of the first portion of the book.

STATE OF FLORIDA.

Office of the Commissioner of Immigration,

JACKSONVILLE, March, A. D., 1870.

The urgent demand for reliable information in regard to the character and resources of Florida, which has been presented from all parts of the United States, has nearly exhausted the supply of books and documents prepared by the State. The preparation of the books already published and distributed by the State has caused a large outlay; and the necessity for a continuance of the gratuitous distribution of tracts and circulars, will of course make an additional expenditure on the part of the State still necessary; mainly for the purpose of turning general attention to the actual inducements to settlers that are offered in our State, and causing some portion of the immense stream of immigration to turn in this direction. And so far as relates to the expenditure necessary for a general circulation of information necessary to stimulate this general interest and movement, it is a proper object for State outlay. But after such general movement is fairly begun, and individuals begin to seek sources of satisfactory reply to the particular questions suggested by their own personal wants, and requisite to the prosecution of special enterprises, there will arise a sort of private demand for more definite and minute information as to particular crops and special characteristics. And for information of this special character, particularly called for by individuals for special and private purposes, those who are to profit thereby should contribute to the necessary expense, and will undoubtedly willingly do so.

Whatever may be the other faults of the book, it is hoped that its truthfulness and reliability may be such, as to cover all its sins, even should they be many.

Every important interest of Florida urges her to strive for her due share of the immense immigration that is rolling its vast tide towards the South, but none of these interests are important enough to excuse any attempt on her part to attract within her borders a single settler by willful misstatements of fact. The truth in regard to her capacity and resources should be carefully sought and fairly presented.

HISTORY.

Some little knowledge of the history of Florida is indispensable to a right understanding and appreciation of her present condition; for, without such knowledge, the scantiness of the present population of the State is perfectly inexplicable, when taken in connection with its natural fertility, its genial climate, and the immense scope of its possible agricultural production. If Florida has such a desirable climate and such a variety and power of vegetable growth, "why are there not more people there?" is an inevitable question, which is best answered by a glance at her past history.

Florida was first discovered in 1497, by Sebastian Cabot, a navigator, sailing under the English flag, but formal possession of her territory was first taken, in behalf of Spain, by De Narvaez in 1525. In 1562 it is probable that a temporary settlement was formed near the mouth of the St. Johns by Ribault, a Frenchman.

In 1564, under the protection of Admiral Coligny, a settlement of Huguenots was formed under the leadership of Lardonierre, on the south bank of the St. Johns, and about six leagues above its mouth. This settlement was called Carolin, and was completely destroyed by the Spaniards under Menendez in 1565, who massacred all that escaped death in the fight, "not as Frenchmen, but as heretics." This murderous act was fully avenged by a Frenchman, De Gourges, who, in 1659, led an expedition especially against Fort Carolin, and massacred the Spanish garrison, "not as Spaniards but as murderers."

In 1565, the same Menendez founded a Spanish colony at St. Augustine, thus establishing the first permanent European town on the continent of North America.

In 1584, as the result of various expeditions, the area of Spanish occupation and conquest had become so extended that the authority of Spain was acknowledged by the natives, not only throughout Florida, but as far west as the Mississippi, and as far north as the mountains of Georgia.

In 1586 St. Augustine was attacked and plundered by a party of English adventurers under Drake. In 1611 it was pillaged by the Indians, and in 1665 was sacked by another party of English pirates under Davis.

In 1689 Pensacola was settled by the Spanish.

In 1702 St. Augustine was unsuccessfully attacked by Gov. Moore, of the English Colony of South Carolina. In 1725 Col. Palmer of Georgia also failed in an effort to take the city; and in 1740 Gen. Oglethorpe, of Georgia, was signally repulsed in a similar undertaking.

In 1763 the whole territory of Florida was ceded by Spain to Great Britain, but the entire population of the territory, at the time of the cession, did not exceed six hundred.

In 1767 Doctor Turnbull, an English colonist located at New Smyrna, imported fifteen hundred Corsicans and Minorcans, having deluded them by unstinted promises of land and employment at high wages, and then subjected them to a system of oppression, similar and scarce less severe than slavery, till after a lapse of some ten years, they escaped in a body from his servitude, and betook themselves to St. Augustine, where they settled down and ultimately became a prominent and valuable element of the population of that section.

In 1781 the Spanish captured Pensacola, and the English again lost possession of Florida, and in 1784 the territory was once more formally ceded to Spain.

In 1812 Fernandina capitulated to troops of the United States, but was, during the next year, re-delivered to the Spanish Government.

In 1814 the English forces, under the command of Col. Nichols, entered and manned the forts at Pensacola, although the whole country was nominally under the control of Spain, and in 1818, Gen. Jackson attacked and captured Pensacola, in behalf of the United States.

In 1819 Florida was purchased by the United States, and was formally ceded by Spain. In 1822 a territorial government was established; in 1845 Florida was admitted to the Union, and in January, 1861 she seceded.

Such is a brief abstract of the leading facts in the history of Florida. What a picture it presents! Discovered in 1497, permanently settled in 1565, ceded to Great Britain in 1763, with a population of only six hundred, after a colonial existence of two hundred years, re-ceded to Spain in 1784, sold and ceded to the United States in 1819, receiving a territorial government in 1822, admitted to the Union in 1845, seceding in 1861, and reconstructed in 1868. Sacked and pillaged repeatedly by Europeans, shifting its nationality from time to time, and losing almost its entire population by each change, harassed and plundered by repeated Indian wars from 1816 to 1858, and just as prosperity began to dawn, plunged unnecessarily into the useless slaughter of a hopeless rebellion, she has suffered every evil, political and social, that does not involve absolute extinction.

The wonder truly is, not that she has not attained a more flourishing condition, but that she exists at all, and that her boundless forests, her lovely rivers and her beautiful lakes are not fast locked in the silent embrace of a moveless desolation.

Without such reference to her previous history, there would be an irreconcilable discrepancy between the present condition of Florida and that which might naturally be expected from a consideration of her fertility, her climate, and her resources.

POPULATION.

The population of Florida in 1860, was 140,123; but in 1867 it had increased to 153,659—having thus increased by 13,236, or something over nine per cent.

This is a very respectable addition, when we consider that it occurred during a period of war, and general and local disturbance and confusion.

This population is distributed through the various Counties of the State, as follows in a table compiled from the census returns.

1860.				1867.			
Counties.	Whites.	Colored.	Total.	Counties.	Whites.	Colored.	Total.
Alachua.....	3767	4465	8282	Alachua.....	4191	6812	11003
Baker.....	.....	.....	.....	Baker.....	1015	189	1204
Bradford.....	3075	745	3820	Bradford.....	2018	409	2427
Brevard.....	224	22	246	Brevard*.....	224	22	246
Calhoun.....	895	551	1446	Calhoun.....	1015	385	1400
Clay*.....	1383	526	1914	Clay*.....	1388	526	1914
Columbia.....	2582	2064	4646	Columbia.....	3570	2732	6303
Dade*.....	80	3	83	Dade*.....	80	3	89
Duval.....	2925	2149	5074	Duval.....	4580	6696	11276
Escambia.....	3654	2114	5768	Escambia.....	3732	2153	5885
Franklin.....	1378	526	1904	Franklin.....	1349	566	1915
Gadsden.....	3981	5415	9396	Gadsden.....	3258	4314	7572
Hamilton*.....	2734	1420	4154	Hamilton*.....	2734	1420	4154
Hernando.....	1000	200	1200	Hernando.....	1886	885	2721
Hillsborough.....	2415	566	2981	Hillsborough.....	1665	298	1963
Holmes.....	1271	115	1386	Holmes.....	1090	95	1185
Jackson.....	5263	4946	10209	Jackson.....	4241	4499	8740
Jefferson.....	3493	6378	9876	Jefferson.....	2543	4546	7089
Lafayette.....	1490	578	2068	Lafayette.....	1843	194	2042
Leon.....	3194	9149	12343	Leon.....	3257	11630	14887
Levy.....	1331	450	1781	Levy.....	1238	337	1575
Liberty.....	935	521	1456	Liberty.....	844	473	1317
Madison.....	3521	4253	7779	Madison.....	4510	6269	10779
Manatee.....	601	253	854	Manatee.....	1395	55	1450
Marion.....	3294	5315	8609	Marion.....	3742	7152	10894
Monroe.....	2302	611	2913	Monroe.....	3069	572	3941
Nassau.....	1978	1066	3044	Nassau.....	1871	1631	3502
Orange.....	823	164	987	Orange.....	1374	142	1516
Putnam.....	1634	1078	2712	Putnam.....	1733	989	2722
Polk.....	.....	.....	.....	Polk.....	1380	128	1508
Santa Rosa.....	4048	1432	5480	Santa Rosa.....	2111	505	2616
St. John's.....	1953	1085	3038	St. John's.....	1906	748	2654
Suwanee.....	1467	836	2303	Suwanee.....	1883	1284	3167
Sumter.....	1000	549	1549	Sumter.....	1264	502	1766
Taylor.....	1259	125	1384	Taylor.....	1363	140	1503
Volusia.....	861	297	1158	Volusia.....	858	351	1209
Wakulla.....	1672	1167	2839	Wakulla.....	1487	1108	2595
Washington.....	1670	484	2154	Washington.....	1946	362	2308
Walton.....	2584	453	3037	Walton.....	2329	293	2622
Total.....	77747	62676	140123	Total.....	81994	71665	153659

* No returns. Assumed to contain the same number as in 1860.

The number of males over 21 years of age is, of whites, 16,532, and of colored, 15,104, giving a total of 31,636.

It will be observed from the above table, that in some portions of the State the population has more than doubled in seven years; but this increase is owing rather to circumstances than to the comparative richness and fertility of the soil; while the location of this increase along the railroads and navigable water courses, demonstrate that we are indebted to immigration mainly therefor—and this fact is strongly indicative of what may be accomplished in the future under an active and efficient discharge of the duties intrusted to the Commissioner of Immigration, if the people of the State give him that hearty coöperation which they seem disposed to offer.

Nothing but a common effort to make known the actual and possible resources of State and Legislative action, is necessary to direct hither a large portion of that outflow of men and means which is steadily issuing from the Northern, and latterly from the Western States, and from foreign countries.

GEOGRAPHY.

Some knowledge of the geography of a country is, under any and all circumstances, nearly indispensable to enable one to obtain a thorough acquaintance with its present resources and possible capacity. This knowledge of the geography of the Southern States is particularly necessary for those who come from the North, or from abroad; for many well-known facts, and susceptible of abundant proof by the best of evidence, are almost, if not entirely incredible, because they would be simply impossible, if in the climate, and soil, and under the atmosphere of the North.

Therefore, to those who wish to become fully informed in respect to Florida, her peculiar geography becomes, of necessity, a matter of interest.

The geography of Florida is unique, and is of special interest, because many of the important characteristics of the State, which seem to be contradictory, if not impossible, are easily explained by a consideration of its peculiar position and geographical character.

The shape of Florida is somewhat like that of a boot upside down, the foot part extending northerly, and the leg pointing to the south. The foot part thus extends some 350 miles, from east to west, along the parallel of 31° north latitude, and from 80° to 88° west longitude from Greenwich; while the part that would represent the leg, or the peninsula proper, extends southwardly from 31° to 25° north latitude, thus reaching over some 400 miles.

The State contains 59,868 square miles, or 37,931,520 acres. The whole territory lies within the region denominated as "hot" by the physical geographers, and is in the same latitude with Northern Mexico, the Desert of Sahara, Central Arabia, Northern Hindostan, the northern portion of Burmah, and the southern portion of China;

but its comparative degree of heat is not accurately indicated by its latitude, for accurate scientific observation shows it to be isothermal with Southern California, Louisiana, the Bermudas, the Island of Madeira, Barbary, Egypt, Northern Arabia, Persia, Northern Hindostan, Thibet and Southern China. Moreover, the results that might be expected from its geographical location, are materially affected by its peninsula shape, and its oceanic surroundings. The main portion of its surface is included in a peninsula projection extending southwardly between the Gulf of Mexico and the Gulf Stream, which, in its exit, traverses its Eastern coast for about 300 miles.

The peninsula averages in width about ninety miles, and is fanned by the Gulf winds on one side, and the Trade winds on the other; and thus, with so slight a breadth, every portion is exposed to the balmy and vivifying influences of almost constant oceanic winds; and, from all these geographical peculiarities, has resulted a pleasantness and salubrity of climate, and a power of vegetable production so wonderful as to be almost incredible.

The surface of the State is, as a whole, remarkably level, though this is more characteristic of the eastern and western portion than of the central part. From the Apalachicola eastward to the Suwannee, and westward about the same distance, the surface is somewhat rolling, and an occasional ridge of what are called hills, lends a sort of variety to the somewhat monotonous succession of pine, hummock and cypress lands stretching as far as the eye can reach over an almost dead level.

Perhaps the most marked of the geographical features of the State is to be found in the enormous extent of her coast line, which, on the Atlantic and the Gulf, exceeds eleven hundred miles; and the coast line is also remarkable for the great number of large bays and estuaries, which furnish facilities for commercial intercourse, that in the near future will hasten the development of the resources of Western and Southwestern Florida beyond the expectations of the most sanguine.

Another marked geographical feature of the State is found in the number of large and navigable streams. The Apalachicola, the Suwannee, the St. Mary's and the St. John's, would be noticeable rivers anywhere—and the St. John's is one of the most surprising rivers on the globe. When it is considered that not an eminence in East Florida attains the height of 200 feet, the St. John's, fed in great degree by the oozing waters of the Everglades, and winding through a very level region, will strike any stranger with astonishment as he ascends it and finds its average breadth for 150 miles to be more, rather than less, than two miles. The ebb and flow of the tide are quite perceptible at the upper end of Lake George, more than 150 miles from the mouth of the St. John's.

Although the general character of the soil of Florida is sandy, still few portions of the whole United States are more bountifully provided with water, and that easily accessible. Springs of all kinds,

some of clear, sweet water, some strongly impregnated with sulphur, and others characterized by various mineral admixtures, are so abundant as to be little noticed. Some of these springs are of gigantic proportions—so large that complete rivers rush at once from the very bowels of the earth; and to those who have never seen them, or those similar to them, a plain and simple description of these becomes almost incredible.

Two of the most famous of these springs are thus described in Williams' History of Florida: "The Wakulla River rises about ten miles N.W. of St. Mark's, from one of the finest springs in Florida, or perhaps in the world. It is of an oval form, the largest diameter of which is about six rods. It is of an unknown depth, and perfectly transparent. In looking into it, the color resembles a clear blue sky, except near the border, where it has a slight tinge of green, from the reflection of the surrounding verdure, which hangs over it in drooping branches and waving festoons. The eastern side presents a rugged, rocky precipice; all else is an abyss of boundless depth. Squadrons of fish are seen careering around "their own world" in perfect security. The water is moderately cold, and highly impregnated with lime. The beauty of the fountain, the luxuriance of the foliage around it, and the calm retirement of the whole scene, render this one of the most charming spots that West Florida affords."

"The big spring of Chipola offers a very different scene. Here, also, a river bursts from the earth, with a giant force, from large masses of rugged rocks, with furious rapidity, as though impatient of restraint. The orifice opens to the southwest, from a high swelling bank, scattered over with large oak trees. East and west, the orifice may be thirty feet, by eight feet wide. A large rock divides the mouth almost into two parts, at a considerable depth below the surface. The water acts as a prism; all objects seen through it on a sunshiny day, reflect all the colors of the rainbow. This spring at once forms a river six rods wide and eight feet deep, which joins the Chipola river at about ten miles' distance."

Such is the description of the sober historian. Silver Spring, in Marion County, is another of these remarkable springs, large enough to admit to its very source the steamers that navigate the Ocklawaha River.

And in any part of the State, from the sands of the sea-beach to the clay soil of the central portion, good water can easily be reached in wells of from 10 to 20 feet in depth.

A mere glance at the map will show almost innumerable lakes, ponds, rivers and creeks, very uniformly scattered throughout the whole surface of the State.

SOCIAL CONDITION.

In considering the condition of society in Florida, and in the formation and appreciation of conclusions reached, it is first and always to be borne in mind that Florida, although in fact the oldest settled State in the Union, is, perhaps with the single exception of Oregon, probably the most sparsely settled, exhibiting in 1860 a population of only 2.37 to the square mile.

Again, in comparing, as is natural, this State with any of the Northern States, it is to be remembered that she started and has progressed under very different circumstances from those attending the growth and progress of any other State, either North or South, and has had far more than her proportion of obstacles and obstructions to contend with, both politically and socially.

In other States, whatever government has been originally adopted, the same has thereafter remained in force, except as affected by the rebellion, with very little alteration; and thus, in those States, age and stability have added force to all the elements of growth, strength and prosperity; have tended gradually and naturally to overcome the influences adverse to the development of each. But from the earliest period in her history, Florida has had no stable and permanent growth; but has been tossed about from nation to nation like a veritable political shuttlecock, with no opportunity to grow in strength, and actually weakened by successive changes.

In other States, whatever may have been the circumstances of their original settlement, and however adverse may have been the character and derivation of their population, the equality of all before the law, the common enjoyment of the same opportunities and privileges, and the common participation in administering democratic governments, have all uniformly and powerfully tended, by gradual but rapid assimilation, towards a homogeneity of population. But all such tendencies in Florida have been effectually checked by her frequent and successive changes of nationality. There has not been, and there could not well have been, that intimate commingling of races which prevails elsewhere, and is indispensable to political and social progress.

Florida, though in fact an old State, has all the characteristics of an entirely new-settled State. Its circumstances and its political uncertainties have not only not attracted immigration, but have really, from time to time, driven from her valuable elements of population. The better portion of the Spanish population departed when the English took possession; and when, in turn, the country was re-ceded to Spain, the English settlers, who had just begun to receive rich rewards for their agricultural investments, and by whose skill a brilliant future had begun to appear, took their departure, some voluntarily, and some under government compulsion; and so, again and again, the progress made by each nationality was absolutely lost in the occupation of its successor.

Thus the State is still a wild and new State. The rank growth of the forest trees over-shadowed and concealed the vestiges of successive occupations, and the traveler is often astonished to find in the middle of dense forests the ruins of mills and houses, and the remains of ditches and canals on a grand scale---silent but significant mementoes of a recent though almost-forgotten past.

The scanty population of less than 200,000 is scattered over an immense territory of nearly 60,000 square miles, and has been engaged almost entirely in agriculture; and the main, and hitherto all-absorbing object of that pursuit, has been the raising of cotton. The preëminence given this crop, and the prevalence of slave labor, have conspired to stimulate the universal Southern passion for the acquisition of land; and thus have all combined to crush out all diversity of occupations not directly tributary to and concerned in the raising of cotton. There has been no tendency to settle in villages and communities; but the general tendency has been towards a separation rather than concentration of population. Whether or not cotton has been "king," it has certainly been a social tyrant; and decreeing its votaries to the vast solitudes of remote plantations, has prevented the formation of those small villages as centres of population, where, as in the Northern States, the school, the church, the press and post-office are recognized as the essential instruments and means of social progress---necessities of social existence, that must be had rather than as conveniences or luxuries.

Accordingly, disappointment will surely meet those who, coming from other sections, and particularly from the North, anticipate the enjoyment here now of the same social advantages to which they have been accustomed at home. All such means of social culture and improvement are easily possible here as elsewhere; but here, as elsewhere, they must follow---they cannot precede---an absolute and entire change in the methods of agriculture, and an increase in the diversity of occupations. It is hard to change the habits, whether social or agricultural, of communities, and as hard to implant new social wants, except by the introduction of agencies of a new and different character. Hence, we need strong immigration of new men, with new views and new desires, first, and then the means of gratifying the social needs of a progressive society will follow.

Schools and churches are to be found in all the towns and villages throughout the State; but there has hitherto been no public school system in the Southern States, as such systems are known in the North and West. In all of these, the population has arranged itself, and naturally enough, under the aristocratic tendencies of slavery, into the three divisions of planters, poor whites and slaves. Safety forbade the education of slaves, the poor whites neither desired nor could afford the expense of private schools, and the planters, having the means, preferred private to public schools. And of course the local governments, administered in the interests of the wealthy classes, would neither establish nor enforce any system of public free schools.

But the ratification by the people of the new Constitution, gives assurance of the thorough reconstruction of the State under much more favorable auspices in all directions. The establishment and provision, by adequate taxation, for the support of a sufficient system of public schools, is a leading feature of the constitution, and can easily be so administered as to meet all the present and future educational wants of the State.

When the inducements of various kinds which Florida holds out to immigration shall be fully known in other sections of the country, it is confidently anticipated that a tide of population from all sections will flow in, that will enable the material resources of the State to be developed, and then all desirable social advantages and opportunities will follow.

The spirit of the people, taken as a whole, is good---as good as under the circumstances could reasonably be expected by thoughtful and observing men. In estimating properly the present social condition of the State, special reference must be had to the radical revolution that has been wrought in all matters, social and political, within the last few years. The collapse of such a rebellion, and the complete dissipation of the dreams indulged, have, of necessity, left a degree of soreness and disappointment, resulting in a bitterness of feeling which is not unnatural, and which could not reasonably be unexpected by any reasonable man.

And one of the results has been a sort of natural settling of the population into three classes---the native whites who favored secession, the loyal whites with the Northerners, and the freedmen; and much time must necessarily elapse, under the most favorable circumstances, before these classes, so recently placed in such diverse and antagonistic relations to each other, can quietly settle down together to stand upon the same platform, of enjoyment of identically the same rights, and the exercise of the same rights and privileges. It would be simply preposterous to suppose that in so short a time the small class of privileged slaveholders, forming the most compact and absolute social and political oligarchy known to history, should, with perfect equanimity, see themselves shorn of their political power, and not only reduced to the common level of the simple democratic citizenship, but constrained to feign cheerfulness in the extension of all the rights of equal suffrage and political privileges to those over whom they had, within a few years, exercised all the rights of the most absolute ownership and complete control; and in addition to all this, to regard with instant and spontaneous affection the representatives of that loyalty and unionism that have brought these wondrous changes about.

Having reference, then, to all these things, it may be said with truth that the existing feeling of the whole people of Florida towards immigrants is good---as good as could with reason be anticipated.

While it is undoubtedly true that a stranger could not reasonably hope to meet with as much cordiality and courtesy in the South as

in those more fortunate regions that have never been tossed in the boiling cauldron of secession, or been cursed with the pressure of the iron heel of conquering armies in a bitter civil war, it is also true that there is absolutely nothing to deter an immigrant who seeks to better his condition, from settling in Florida, except the absence of that courtesy and kindness which he would receive at the West, or even in the South, before the terrible struggle for the death of slavery had perverted the minds and embittered the hearts of men.

In our correspondence, the question is often asked, "Is it safe for a Northern man to come to Florida?" The answer is, that there is no sort of danger whatever.

The immigrant of good character and habits will be readily received by all. Southern men and women are not super-human, and cannot be expected suddenly to absolve themselves from the domination of those trains of political thought and those prevalent social notions that have ruled them for years, or to sympathize at once with the political ideas of a triumphant radicalism.

But the whole population of the State is becoming rapidly convinced that "men, money and labor," are to be watchwords in the success of the future of Florida; and indeed a recent movement has been made in concert, and associations are being formed in the various counties, to coöperate with the Bureau of Immigration, established under the new Constitution, in the promotion of immigration, by offering all practical inducements within their power; and at a recent public meeting in Jacksonville, at which were representatives from all parts of the State, the most eminent and influential men in the State, of all parties, united in expressing a determination to do all that could be done to promote the immigration upon which the future prosperity of the State must depend.

Indeed, any good citizen that proposes to pay special attention to his own affairs, will be welcomed by all, and this without any sacrifice of principle, or any abridgement of his rights of free thought and free speech.

Northern men and women, who may come and persist in associating exclusively with each other, and sequester themselves diligently from all social intercourse with old residents, will be allowed thus to indulge their social predilections without let or hindrance.

But those who come with a disposition by individual or general effort to contribute to the common good, and assist the common progress, and who will, by social and kindly intercourse, assist in the doing away of unfounded dislikes and unreasonable prejudices, however boldly, and openly, and frankly, if only with a right purpose, they may vindicate their right of individual independence of thought and action, will not only be tolerated, but respected and cherished.

Still, it is as undoubtedly true of Florida as it was of Kansas, and indeed is of every new State, that a want of the means and appliances

for social comfort and advancement must, for a time, be expected by new comers; and the best way in which immigrants may avoid the consequent inconveniences and deprivations, is by coming in groups of five or more families, and thus secure from the first those social interchanges which are of the first importance everywhere.

Another and commanding recommendation for such grouping of such immigrants, is to be found in the fact that much of the most valuable land, both for fertility and accessibility, is included in large tracts, which were originally government grants, and whose owners are disinclined to divide and sell in smaller parcels.

Such large tracts are often valuable, but larger than single settlers need or will buy, while a colony of men who desired to settle together and form a community, can combine their means, and thus easily secure to each such portion as he desired, at reasonable rates.

And this subdivision of large plantations is the first indispensable step to be taken before any general agricultural prosperity can be hoped for.

POLITICAL CONDITION AND GOVERNMENT.

The political condition of the State may be said to be very encouraging. It is true that Florida, at the outbreak of the Rebellion, adopted the doctrines of Secession, and fought bravely to secure their supremacy, and suffered largely in the war, but she always had a very large loyal element. Many of her citizens were strongly attached to the Union, and proved it by their constancy under much suffering and sacrifice. The vote upon secession was exceedingly close, and while her citizens bore their full share in the support of the Rebellion, still, when the war was ended, her people accepted the result with as much good faith as the people of any Southern State. It was inevitable that much bitterness of feeling should exist and that some remnants of hostility should remain after the great collapse, but it may with truth be said that less of bitterness and hard feeling was exhibited after the war, in Florida, than in any other seceding State. And there has been less of actual outrage and violence, than anywhere else in the Southern States.

Florida accepted the proffered policy of President Johnson, organized anew a State Government in all its branches, which went into comparatively peaceful operation. This caused the disappointment of many of her people to be more poignant, when the Congressional policy of Reconstruction prevailed and all her labors of re-organization were made futile and set aside.

But, notwithstanding this, and although many instances of disorderly conduct and some of violence and even bloodshed have occurred, in no other Southern State has there been so little of the administration of Lynch law, or so much of quiet and the regular pursuit of the ordinary avocations of business.

Since the election which gave to the State a regularly organized State Government, the spirit of submission to law, and of good feeling between the different classes of the citizens has been constantly and rapidly increasing, and the time is not very far distant when the absolute extinction of the old political issues will be fully recognized and the hostility and bitterness which were the inevitable consequences of civil war will be buried with the causes which produced them.

It is not intended to assert that the Reconstruction policy of Congress met with no opposition in Florida, for, in fact, it encountered an organized and determined opposition, but this opposition had more of the element of regular political antagonism and less of violent and fractious conduct, than was found in any other Southern State.

After a somewhat excited contest, the people of the State, by a very respectable majority, determined to have a Convention for the construction of a form of Constitutional Government, and the Convention elected under the legislation of Congress, assembled at the Capitol on the 20th day of January, 1868, and after a brief session, completed their work by the formation of a State Constitution, which, on being submitted to the people, was ratified by a large majority. The Constitution having been approved by Congress, and all the conditions of the Reconstruction Acts having been complied with, Florida has been re-admitted to the National Councils, and has resumed her appropriate position among her sister States.

The new Constitution of Florida has been criticised severely, as was to be expected, and grave objections have been made to some of its provisions, but, on the whole, we believe it will compare favorably with the Constitutions of the other States, and that under it none of the rights of the people can be withheld or impaired.

The Executive power of the State is vested in a Governor, who is elected for four years. The Legislative power is vested in a Senate and Assembly. The former consists of twenty-four members, elected for four years; the latter, of fifty-three members, elected for two years. The first Tuesday after the first Monday in November is designated for the election of State and County Officers and members of the Legislature. Annual sessions of the Legislature are to be held, commencing on the first Tuesday after the first Monday in January.

The Judicial power is vested in a Supreme Court, Circuit Courts, County Courts, and Justices of the Peace. The State is divided into seven Circuits. Two terms of the Circuit Court are held yearly in each County. The Supreme Court is to be held at the Capitol of the State.

The Supreme Court is invested with the usual powers bestowed upon that tribunal elsewhere—having authority to issue all writs necessary for the exercise of its power.

The Circuit Courts in the several Judicial circuits have the powers and jurisdiction which usually appertain to County Courts in the Northern States.

"The County Courts, which are organized in each County, are Courts of Oyer and Terminer, having jurisdiction of all civil cases where the amount in controversy does not exceed three hundred dollars, and its jurisdiction shall be final in all civil cases where the amount in controversy does not exceed one hundred dollars; but, in no case shall the County Court have jurisdiction when the title or boundaries of real estate are in controversy, or where the jurisdiction will conflict with that of the several Courts of Record; but they may have co-extensive jurisdiction with the Circuit Courts in cases of forcible entry and unlawful detention of real estate, subject to appeal to the Circuit Court. The County Court shall have full Surrogate or Probate powers, but subject to appeal. Provision shall be made by law for all other powers, duties and responsibilities of the County Courts and Judges."

"There shall be a regular trial term of the County Courts six times in each year, at such times and places as may be prescribed by law."

"Grand and petit jurors shall be taken from the registered voters of the respective counties."

There are some other features of the new Constitution that are eminently worthy of notice.

1. It secures immediate and absolute civil and political rights to all before the law, irrespective of race, color or condition. Neither the words white or black are to be found in the instrument. Its spirit is that of equal rights and impartial justice to all.

2. The right of petition of habeas corpus, and the entire liberty of conscience, so long as that liberty does not run into licentiousness, are secured to all by plenary provisions.

3. Excessive bail, that convenient instrument for the gratification of private hate and public oppression, is expressly prohibited.

4. The right of free speech, so far as consists with private justice and public safety is amply secured.

5. There can be no imprisonment for debt, except in cases of fraud.

6. Foreigners who are or may become bona fide residents of the State, are to enjoy the same rights in regard to the possession, enjoyment and inheritance of property which appertain to native born citizens.

7. Slavery and secession are, in specific terms, most solemnly abjured, and it is provided that "this State shall ever remain a member of the American Union, the people thereof a part of the American nation, and any attempt, from whatever source, and upon whatever pretense, to dissolve said Union or to sever said nation, shall be resisted with the whole power of this State."

8. The right to have arms in self defense is guaranteed to every citizen.

9. Ample authority for the establishment and support of institutions for the insane, the deaf and the blind is given.

*This Church is built of Concrete Shells
is rather Shell Concrete - Called
Cokimen Cokimen*

10. Counties are empowered and directed to see that the poor are cared for at the public expense.

11. It provides with the utmost liberality for a noble and generous and comprehensive system of Education, consisting of free Public Schools, Seminaries, and a University, equally open to all, and depending for sufficient support upon general taxation of all the real and personal property.

12. It makes provision for a uniform and equitable assessment of all property of every description in the State, and for a just and equal taxation of the same.



CATHOLIC CHURCH, ST. AUGUSTINE.

13. The right of trial by jury is also, by special provision, guaranteed to all.

14. It relieves the persons of the poor almost entirely from taxation, by limiting the capitation tax for any and all purposes to one dollar per annum, thus throwing the burden of taxation mainly upon the property of the county.

15. It exempts a liberal Homestead and a generous allowance of personal property, "A Homestead to the extent of one hundred and sixty acres of land, or the half of one acre within the limits of any incorporated city or town, owned by the head of a family residing in this State, together with one thousand dollars worth of

personal property, shall be exempted from forced sale under any process of law." Such is the language of the Constitution, which also secures the mechanic's and laborer's lien upon property to which his labor has given an added value, by providing: "But no property shall be exempt from sale for taxes, or for the payment of obligations contracted for the purchase of said premises, or for the erection of improvements thereon."

16. All Lotteries are expressly prohibited.

17. The Governor is assisted in his deliberation by a Cabinet composed of the principal officers of the State, viz: The Secretary of State, the Attorney General, the Comptroller, the State Treasurer, the Surveyor General, the Superintendent of Instruction and the Commissioner of Immigration. This is a novel feature in the frame-work of a State Government, and although such an arrangement may, in case of dissension between different members of the Cabinet, or where differences of opinion between the Governor and his Cabinet occur which are irreconcilable, obstruct the operation of the Government, and work harm to the best interests of the State, still it is difficult to discern why a Cabinet, which the experience of years has shown to be advantageous in the management of National affairs, should not be desirable in the direction of the affairs of a single state.

The Governor having the sole power of nominating to the Senate the members of which his Cabinet must be composed, has, in his option, the power to surround himself with the soundest judgment and best ability in the State, and profit by their counsel and advice. It may be doubtful whether this alone is not sufficient to counterbalance all objections that can be made to the existence of a State Cabinet.

18. All the officers of the Government are made liable to impeachment and removal from office, not only for the causes commonly assigned, but also for drunkenness, gambling and conduct detrimental to good morals.

19. Bribery, betting upon the result of elections, and duelling, exclude not only from office, but also from exercising the right of suffrage.

20. In all cases where a general law can be made applicable, the Legislature is prohibited from passing any local or special law.

21. The Constitution extends an equal participation in all rights and privileges to all of foreign birth who have declared their intention to become citizens of the United States.

22. "The Legislature shall enact laws requiring educational qualifications for electors after the year 1880, but no such law shall be made applicable to any elector who may have registered and voted at any election previous thereto."

23. The Judges of the Supreme Court are appointed for life; the Circuit Judges for eight years; the Judges of the County Court are appointed for four years. State Attorneys are also appointed for

four years. Senators are elected for four years, Members of the Assembly for two years.

Such are some of the leading characteristics of the new Constitution, which, as before remarked, will compare not unfavorably with that of any other State.

A somewhat extended reference is here made to the leading features of the Constitution. First, because thoughtful and intelligent men who are considering the eligibility of Florida as a place of settlement, desire, and will appreciate the information thus given, and secondly, because many erroneous notions in regard to the character of our State Constitution have circulated abroad, deriving their origin from those mis-statements and exaggerations which are always afloat in times of political excitement.

The possession of these features that are recognized as valuable in other well-established and well-received Constitutions, which have operated well in other States will commend the Constitution of our State to all, while the permanence of the tenure of the Judges, giving assurance of an independent Judiciary—and generally the length of the tenure of office of all the prominent officers of the State will attract attention and win commendation.

The ample provision for the easy and rapid administration of Justice by the number and distribution of the Courts will form another strong claim to regard, as will also the ample provision for homestead exemptions, for general education, and the just and liberal extension of equal rights to all of every class, without reference to place of birth, race or previous condition, and many other provisions.

Indeed, it is believed that the Constitution of Florida will not, upon the whole, suffer by comparison with that of any other State, North or South, while objections which exist as to some of its features in those who are, necessarily, from want of acquaintance with our people and our peculiar circumstances, forced to judge upon merely theoretical grounds, would disappear upon the acquisition of a more perfect knowledge of the circumstances in which the Constitution must operate, and by which its character was necessarily somewhat controlled.

CLIMATE.

The climate of Florida is one of its chief attractions. Mild in Winter, and not excessively hot in Summer, the temperature is more equable than that of any other State of the Union. The thermometer rarely falls below 30°, or rises above 95°. From the records contained in the Spanish Archives at St. Augustine, we learn that the mean temperature of the Winter months for 100 years averages a little over 60°, and of the Summer months 86°, Fahrenheit. Constant mention is made of the daily recurring sea-breeze, which cooled off the after part of the day, and gave a delightful atmosphere for nightly rest. Here in Florida the many whose constitutions are feeble, or impaired by disease, can find a refuge from the inclement winters of the Northern States.

It is not enough, however, for those who think of making Florida their future home, to know that her winters are delightful. They want the facts about the climate, and especially about its healthfulness, all the year round.

Hence, no question can be more important, and, in fact, none is more frequently asked, than the question, "How does the climate of Florida affect the health of immigrants?" The most unaccountable misapprehensions are very widely prevalent in regard to this topic, so that the received idea of many seems to be that Florida is a land of swamps, and her atmosphere surcharged with the most noxious and poisonous vapors, to the extent that makes the very hope of health and long life within her borders futile.

Now, in fact, if the sanitary statistics of the country, and the official reports of sanitary officials are entitled to the credence customarily conceded to them, not another State in the Union can show as clean a bill of health as can be exhibited by Florida. And this is more remarkable when it is remembered that a very large proportion of the transient population of the State is made up of invalids from other sections, who have come to Florida as a last resort,—despairing of any sanitary improvement elsewhere.

For very many years St. Augustine has been known far and wide as one of the most healthy locations in the whole country, or, indeed, in the world. For a hundred years her streets have been filled with invalids from all parts of the world. And the climate of St. Augustine is the climate of East Florida. Northerners have long resorted to Florida, to find in her mild and genial climate a relief from the piercing winds and frigid temperature of the Northern and Middle States; while the cool and wholesome winds of the Atlantic and Gulf have operated to bring annual crowds from Alabama, Georgia, and the Carolinas, to escape the blazing sun and torrid heats of those States. Those who, from frequent visitation and repeated experiment, are best informed, all unite in declaring the climate of Florida to be unequalled in the world for comfort and health.

That many die, and of consumptive complaints, is undoubtedly true; but of most of them, it may be said they were doomed before they left home to try a Southern climate as their last hope, and that their lives had often been prolonged, where they had long been beyond all hope of complete restoration. Many a man, now in Florida, is enjoying a fine state of health, who would have had, anywhere else, but slight hope of life, even.

Some of the lands in various parts of the State are low, and at the same time are exceedingly rich; and there, as in all regions where a rank and luxuriant vegetable growth is general, will also be found those types of diseases which elsewhere universally characterize such regions. But all such diseases assume a much milder type than in other sections where they are prevalent.

That there is much swampy land in the State, is true; and it is also true that the dense vegetable growth of the swamps and lagoons,

and low hummocks, must, of course, whenever vegetable decomposition occurs, furnish a great deal of the food that nourishes fevers and kindred diseases; but the effects of these causes are measurably counterbalanced by the almost constant breezes that fan the atmosphere, and purge its evil humors—and the immense preponderance of pine forests, open to the breezes, and perfuming the air with their pleasant and wholesome odor.

In a series of letters from an old resident of Florida, recently re-published in Ocala, the climate and healthfulness of Florida are quite fully treated, and an extract from the pamphlet is here inserted, as more authentic and more satisfactory than any original matter which we can furnish:

"The climate of Florida, and especially that of the Peninsula, taking it the whole year round, is much more agreeable than any other in the United States; and indeed it would be difficult to find a climate in any part of the world so agreeable as this. The winters are delightful; five days out of six being bright and cloudless, and of the most agreeable temperature. In the southern portion of the peninsula frost is never felt; and even as far north as the Suwanee river, there are generally but two or three nights in a whole winter that ice as thick as a half-dollar is found. Carver, in discussing the winters of the peninsula, remarks: 'So mild are the winters in East Florida, that the most delicate vegetables and plants of the Carribee Islands experience there not the least injury from that season; the orange tree, the banana, the plantain, the guava, the pineapple, etc., grow luxuriantly. Fogs are scarcely known there, and no country can be more salubrious.'

"The winter in Florida resembles very much that season which in the Middle States is termed 'Indian Summer,' except that in Florida the sky is perfectly clear, and the atmosphere more dry and elastic. Rain but rarely falls during the winter months in Florida; three, four, and not unfrequently five weeks, of bright, clear and cloudless days occur continuously. This is one of the greatest charms of the winter climate in Florida; and in this respect it forms a striking contrast with almost every State in the Union, and especially with Texas, California and Oregon.

Contrary to what might be expected, the summer weather in East Florida is much more agreeable, and its heat less oppressive (though its *duration* is much longer) than that which is experienced in the Northern and Middle States. This is attributable, in a great measure, to its peninsular position, which causes it to be fanned on the east by the Atlantic breezes, and on the west by those of the Gulf of Mexico, both of which can be distinctly felt in the center of the State. Besides this, the northeast trade winds play over the whole peninsula. The summer nights are *invariably* cool, and even the hottest days are seldom oppressive in the shade. This is more than any State north of Florida can boast, and is probably owing to her peninsular position. Paradoxical as it may seem, the thermome-

ter ranges much higher during the summer months in New York, Boston and Montreal, than in St. Augustine, Tampa or Key West. In the former cities, the thermometer frequently ranges as high as 100 and 109 in the shade, and that, too, without any breeze to relieve it; whereas it but rarely reaches as high as 90 at any of the latter places. I am credibly informed that a register kept at Key West (the extreme south of Florida) for fourteen years, exhibited but three instances, during the whole period, in which the mercury rose as high as 94 in the shade. But, did it rise even to 104, such is the constant prevalence of refreshing sea-breezes, that less inconvenience would be experienced from it than when it was 85 in the humid and stagnant atmospheres of other climates.

"General Lawson, Surgeon-General of the army, in his official report of the climate, diseases, etc., of Florida, remarks: 'The climate of Florida is remarkably equable and agreeable, being subject to fewer atmospheric variations, and its thermometer ranging much less than any other part of the United States, except a portion of the coast of California. For example, the *winter* at Fort Snelling, Minnesota Territory, is 48 degrees colder than at Fort Brooke, Florida; but the *summer* at Fort Brooke is only about 8 degrees warmer. The mean annual temperature at Augusta, Georgia, is nearly 8 degrees, and that at Fort Gibson, Arkansas, upwards of 10 degrees, lower than at Tampa; yet in both of these places the mean summer temperature is higher than at Fort Brooke, Tampa Bay. In the summer season the mercury rises higher in every part of the United States, and even in Canada, than it does along the coast of Florida. This is shown by meteorological statistics in this Bureau.

"The summer in Florida may be said to be seven months long; so that the *duration* of warm weather is nearly twice as long as in the Middle States. The weather during the whole of these seven months is, however, of a very pleasant temperature; the nights being uniformly cool, and sultry days of very rare occurrence. Indeed, so agreeable are the summers in East Florida, there is little choice between them and the winters; and many of the oldest inhabitants say that they prefer the former.

"The *seasons* in Florida are probably as favorable as in any other State in the Union. There occurs there, as in every other State, occasional droughts of too long duration, and there is sometimes a superabundance of rain; but, as a general rule, the seasons are regular, and well adapted to all the valuable staples of that country. Frequent showers occur during the months of March, April, May and June; and about the first of July what is termed the 'rainy season' commences, and continues till about the middle of September. Although it rains nearly every day during this season, it scarcely ever rains *all* day. These rains fall in very heavy showers, accompanied by thunder and lightning, and seldom last longer than four hours each day. They generally commence at 1 p. m., and are entirely over by 5 o'clock p. m., leaving, for the remaining twenty-

four hours of the day, a cloudless sky and a delightfully cool atmosphere. One of the great virtues of the Florida climate is, that nearly all the rain falls during the productive season of the year; and that during the winter months, when rains are but little required, they seldom fall. The reverse of this occurs in Texas, California, Oregon, and in nearly all the Mexican States.

"As respects *health*, the climate of Florida stands pre-eminent. That the peninsular climate of Florida is much more salubrious than that of any other State of the Union, is clearly established by the medical statistics of the army, as well as by the last census returns. In proof of this the most conclusive evidence can be presented; but it will be sufficient here to quote a few remarks from the Report of the Surgeon-General on this subject. General Lawson states, "Indeed, the statistics in this Bureau demonstrate the fact that the diseases which result from malaria are of a much milder type in the peninsula of Florida than in any other State in the Union. These records show that the ratio of deaths to the number of cases of remittent fever has been much less than among the troops serving than in any other portion of the United States. In the Middle Division of the United States the proportion is one death to thirty-six cases of remittent fever; in the Northern Division, one to fifty-two; in the Southern Division, one to fifty-four; in Texas, one in seventy-eight; in California, in one hundred and twenty-two; in New Mexico, one in one hundred and forty-eight; while in Florida it is but *one in two hundred and eighty seven*.

"The general healthfulness of many parts of Florida, particularly on the coast, is proverbial. The average annual mortality of the whole Peninsula, from returns in this office, is found to be 2.06 per cent., while the other portions of the United States (previous to the war with Mexico) it was 3.05 per cent."

"In short, it may be asserted, without fear of refutation, that Florida possesses a much more agreeable and salubrious climate than any other State or Territory in the Union."

This proposition seems to be vindicated beyond a possible doubt by the statistics of the United States Census of 1860, and this in reference to a special class of diseases in regard to which Florida stands in an unfavorable light, because the very large element of her population composed of invalids are, in the main, those who come here seeking relief from pulmonary complaints. Yet from the census of 1860 we gather that the proportion of those who died from consumption in various of the States of the Union, during the year ending May 31st, 1860, was as follows:

In Massachusetts, 1 in 254; in Maine, 1 in 289; in Vermont, 1 in 404; in New York, 1 in 473; in Pennsylvania, 1 in 580; in Ohio, 1 in 679; in California, 1 in 727; in Virginia, 1 in 757; in Indiana, 1 in 792; in Illinois, 1 in 878; and in Florida, 1 in 1,447.

Solon Robinson says, "As to the salubrity of the climate, I fully believe its average equal to Indiana or Illinois, and certainly no

worse for immigrants, from any of the Northern States, than Central New York was in its early settlement, for those who went into its forests from New England. There are here, as there, miasmatic localities, and localities where mosquitoes are as pestiferous as they are in the Montezuma marshes—no worse, and certainly no worse than I have often found them at various points around New York.”

We have compiled the following tables mainly from a record of Meteorological Observations kept by Dr. A. S. Baldwin, through whose kindness we are enabled to give them to the public. Jacksonville is situated in Latitude 30° 15 min. North; Longitude 82° West. Place of Observation, 14 feet above mean low water. The mean of three daily observations is given. The highest and lowest ranges of the Thermometer each month, for five years, from 1857 to 1861, inclusive, are shown below:

Mean of Three Daily Observations.

MONTHS.	1857.		1858.		1859.		1860.		1861.		REMARKS.
	H. L.	L.	H. L.	L.	H. L.	L.	H. L.	L.	H. L.	L.	
January.....	72	16	76	38	76	30	76	40	75	42	Ice one to two inches thick, Jan. 19th and 20th, 1857.
February.....	81	44	77	39	79	39	79	44	83	43	
March.....	85	41	83	34	84	45	83	40	83	43	
April.....	81	47	86	49	89	53	92	58	85	54	At 7 A. M., Nov. 25, 1860, the Thermometer stood at 25 deg.
May.....	91	61	91	66	92	64	92	58	94	64	
June.....	91	73	92	73	94	70	97	69	98	73	
July.....	89	63	96	74	95	70	98	74	92	70	
August.....	95	75	94	75	91	75	93	73	91	73	
September.....	92	64	86	64	92	70	89	65	92	58	
October.....	81	42	85	62	84	50	87	53	86	57	
November.....	82	27	79	39	79	35	80	25	79	45	
December.....	80	39	78	40	79	36	72	32	74	38	

Earliest frost in the five years, October 27th, 1857. Latest frost April 28, 1858. Latest frost in 1859, February 14th.

Summary of Twenty Years' Observations of the Thermometer, taken at Jacksonville, Fla., by Dr. A. S. Baldwin, showing the Mean Temperature of each Month and Year reported; also, the Means of Twenty Years, for each Month and the whole Year.

YEAR.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean.
1844.....	54.89	54.00	63.47	70.00	81.00	82.00	84.35	84.25	77.33	71.33	65.20	53.00	70.07
1845.....	57.33	54.00	64.22	68.00	77.50	82.00	82.20	82.11	78.32	69.87	59.43	49.00	68.66
1846.....	54.46	57.44	64.82	69.00	78.00	79.00	80.00	80.00	80.00	70.23	60.71	58.12	69.32
1847.....	59.33	58.00	61.79	72.77	75.09	81.14	79.95	82.40	78.85	73.03	64.42	53.94	70.14
1848.....	58.05	53.95	65.15	70.17	77.31	81.33	80.33	81.01	78.33	70.64	55.37	50.27	69.32
1849.....	54.73	54.11	67.59	69.72	75.82	79.17	80.25	82.21	76.28	70.25	61.59	59.33	69.25
1850.....	64.06	56.84	65.02	71.11	76.72	78.22	82.88	84.69	80.60	69.22	62.57	59.01	70.91
1851.....	57.37	63.16	63.33	70.12	76.23	80.28	82.84	82.52	76.42	71.48	63.00	54.00	70.66
1852.....	47.61	61.19	61.66	69.65	78.43	78.34	81.19	80.47	78.61	73.83	63.00	60.40	69.53
1853.....	52.62	58.77	65.01	71.48	77.29	78.89	81.74	82.63	77.55	69.34	64.28	53.45	69.42
1854.....	57.61	61.38	68.21	65.18	74.31	80.57	83.44	83.81	81.02	71.22	59.27	52.77	69.90
1855.....	55.15	57.77	60.50	70.30	73.12	78.35	81.32	82.14	79.78	66.79	68.26	59.06	69.38
1856.....	47.60	56.57	61.65	67.70	76.79	81.88	82.89	85.58	76.25	68.07	62.20	54.50	68.17
1857.....	48.61	62.32	59.26	63.60	72.31	80.08	79.44	80.72	79.30	66.88	61.62	58.03	67.68
1858.....	59.22	57.13	61.52	70.25	76.43	79.43	82.20	81.97	75.43	72.94	57.76	62.06	69.69
1859.....	52.86	58.81	66.72	71.25	75.62	80.60	80.73	79.22	80.09	70.11	64.20	57.37	69.80
1860.....	56.87	61.39	63.47	73.00	76.77	83.26	84.28	81.57	79.71	70.36	62.03	54.63	70.61
1861.....	.....	60.33	63.96	69.62	78.38	81.65	80.53	80.28	79.18	73.36	66.24	59.08	
1866.....	52.06	63.22	62.44	79.29	78.06	81.05	86.08	83.03	80.85	79.32	67.17	60.14	
1867.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Mean.....	55.02	58.03	63.88	70.11	76.59	80.39	81.93	81.98	78.62	70.68	62.54	.....	69.52

The following Summary of Observations, taken from the "Army Meteorological Register," are introduced to show the equability of the climate of Florida, as compared with that of other parts of the United States.

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Y ^{EAR} .
St. Augustine, Fla.	57.03	59.64	63.34	68.78	73.50	79.36	80.90	80.56	78.60	71.88	64.12	57.26	69.61
Tampa Bay, "	61.53	63.54	67.67	72.17	76.64	79.46	80.72	80.43	78.28	74.02	66.94	61.99	71.92
Key West, "	66.68	68.88	72.88	75.38	79.10	81.63	83.00	82.90	81.92	78.11	74.66	71.03	76.51
West Point, N. Y.	28.28	28.80	37.63	48.70	59.82	68.41	73.75	71.83	64.31	53.04	42.23	31.98	50.73
Fort Snelling, Minn.	13.11	17.57	31.41	56.34	58.97	68.46	73.40	70.05	58.86	47.15	31.67	16.89	46.54

The above table shows the monthly and yearly mean of twenty years at St. Augustine; of twenty-five years at Tampa Bay; of fourteen years at Key West; of thirty-one years at West Point, and of thirty-five years at Fort Snelling. While at the latter point the main annual variation in the range of the Thermometer is 59.84 deg; at St. Augustine it is but 23.87 deg.; and at Key West but 16.32 deg.

While the heat in Florida is not more intense during the summer months than at times in all the Northern States, in Winter the Thermometer in Northern Florida even rarely sinks to the freezing point.

YEARS.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
1852..	.750	4.600	3.600	3.800	7.900	7.500	4.468	6.000	9.600	3.600	1.250	.750	53.818
1853..	2.000	.600	2.500	0.268	1.520	3.240	7.400	2.700	9.425	9.700	2.250	3.618	45.221
1854..	3.020	2.150	1.310	4.350	4.450	5.800	6.690	8.900	10.450	1.500	3.550	4.200	56.370
1855..	1.450	1.500	5.350	1.150	1.000	5.425	2.150	6.150	4.340	2.550	2.725	4.100	37.890
1856..	5.900	3.050	5.750	1.330	4.050	4.425	10.850	7.250	1.100	2.200	3.485	2.925	49.375
1857..	1.175	.600	2.920	2.805	3.400	3.650	8.700	10.350	3.775	1.010	1.450	3.050	43.885
1858..	3.050	5.375	3.550	1.250	3.001	1.058	8.657	4.562	10.425	2.000	2.150	3.950	49.027
1859..	2.075	2.300	5.350	2.150	1.450	1.950	6.750	12.150	5.050	2.500	3.350	1.700	35.025
1860..	.350	4.600	2.700	3.700	3.750	3.400	6.400	8.050	1.750	7.950	.550	2.050	45.250
1861..	....	2.550	.800	3.950	3.475	1.560	9.950	7.850	4.450	3.200	.600	1.000	....
1866..	4.200	4.200	4.150	1.700	2.950	4.125	10.500	10.500	8.250	3.150	....	1.600	....
1867..	4.620	3.950	4.100	1.850	2.850	9.850	9.075	6.000	14.600	4.700	.400	.925	62.920
Mean	2.599	2.958	3.506	2.350	3.316	4.332	7.615	7.705	6.935	3.755	1.987	2.489	47.958

A Table showing the number of Inches of Rain which fell at Jacksonville, each Month and each Year reported, and the Average of Ten Years.

It appears from the foregoing Table that more rain falls in August, and less in November, than in any other month. The last season, as everyone who spent the summer of 1867 in Florida will remember, was a very wet one, and the Table shows that more rain fell during the year than in any previous year of which we have the record; the enormous quantity of 14.600 inches falling in the month of September of that year.

The climate of Florida forms an inducement to Immigration so strong that an extract or two from well-known authors upon this subject will not be considered out of place. Mr. Williams, whose work on the History of Florida was published in 1837 and is of very good repute, says:

"The climate of Florida is various, embracing six degrees of latitude and as many of longitude. We necessarily feel a great difference of temperature between the North and South, as well as between the East and West. The mean temperature of St. Augustine is about $69\frac{1}{2}^{\circ}$. It is a little higher in Pensacola; at that place it is also colder in the Winter.

"Frost is felt at some seasons, in any part of Florida, though not usually below Latitude 27° . During eighteen years that we have resided in Florida, the greatest heat has been 96° of Fahrenheit, in the shade. Three or four times it has risen to this height, and on the 6th of April, 1828 it was as low as 30° . At that time ice was made an inch thick at Six Mile Creek, and cut off the crops of corn and cotton as far South as Tomoko, while at St. Augustine and Dunn's Lake, the marks of frost were scarcely discoverable. In usual seasons, the mercury rises to about 90° in the hottest days of mid-summer, and falls to 43° during the coldest days of winter."

In West Florida, the north-west winds are felt much more powerfully than in East Florida. Its effect on fruit trees is exceedingly obvious.

The sweet orange cannot be depended on at Pensacola, while at St. Augustine in usual seasons it affords the staple of commerce.

The land and sea breezes alternate with much greater regularity in West than East Florida. The Peninsula of East Florida projects so far to the East as to divide the current of the Florida wind; one portion of it passes up the coast and forms the charming sea breeze that fans us so constantly each day of Summer, except it be kept in check by the north-east wind.

In West Florida the struggle is between the north-west wind and the trade wind. During Winter our north-east winds are chilly, damp and often rough, but they are never charged with frost, which is often the case with the north-west.

In a work published in 1823, by "Charles Vignolles, Civil and Topographical Engineer," and generally considered one of the best books on Florida extant, is found the following:

"The climate of the whole of Florida during eight months of the year from October to June, is delightful, and one almost continuous

Spring; as the range of the thermometer in the hot months of Summer is only from 84° to 88° , of Fahrenheit, and constantly cooled by sea breezes, they are by no means so oppressive as in the Carolinas and Georgia, and such intense sultry weather as marks the Northern dog days, is seldom ever felt. * * * *

"Generally speaking, the Springs and Summers are dry, and the Autumns changeable; the Winters are mild and even serene; snow is scarcely seen at St. Augustine, twice in a century, but the black frost is an occasional visitant; though, at the severest times the ice has never been formed thicker than a sixteenth part of an inch; its action has never extended South of Cape Canaveral, and but very rarely reaches Mosquito Inlet. The nipping of the white frost occasionally is felt as far as the extreme Capes of Florida, though not an annual visitant.

"The duration of the cold or frost of any kind never lasts but a few hours, and seldom occurs more than once or twice a month in January, which is the severest month. The cold winds are always from the north-west.

"The rains and dews without being troublesome, create at most seasons such a luxuriant vegetation, that the surface of the earth is never without verdure.

"The long absence of the sun, the days and nights being nearly equal, gives the ground time to cool and recover from the daily evaporations.

"Another pleasant consequence of this is the very delightful freshness of the nights in the sultriest season of the year, by which the body is refreshed, the sleep sound, and the natural faculties restored to vigor. * * * *

"That not only St. Augustine, but such parts of East Florida as have been occupied, are healthy, is to be clearly inferred from the fact of the Ninth Regiment of British Infantry having been stationed, during the Revolutionary War, in detachments, at St. Augustine, Matanzas, Piccolati and St. Marks, and during a period of twenty months not losing a single man by natural death.

"That the climate is good for patients of a consumptive habit, is notorious--several persons during the last Winter and Spring, from Carolina and elsewhere, having recovered their health. And that the air is not at any season hurtful, is generally known from the circumstance of the native and foreign ladies walking till late in the moonlight, on Summer and Autumn evenings, with only the slight coverings on their heads of their lace veils or mantillas, and many even without these. Medical men have stated that dampness or discoloring of plaster, soon mouldering of bread, moisture of sponge, dissolution of loaf sugar, and rusting of metals, are marks of bad air. Now all these are marked at St. Augustine, and notwithstanding, it is very healthy. This dampness is occasioned by the saline particles, which, arising from the sea, by no means occasion sickness."

SOIL.

At first sight, the Northern and Western farmer will be inclined to believe much of the soil of Florida nearly worthless. So far from the truth, however, is this impression, that it will not hold good even of the forest lands, the "black jack" ridges, and the low "flat-woods." The soil is generally sandy, with more or less admixture of clay, lime and organic matter. The greater portion of the lands in Florida may be designated as pine lands; the pitch and yellow, or long beard pine (*pinus labrusca*) being the principal timber. In the hummocks it is mingled with white, live and water oak, bay, hickory, magnolia, cabbage palmetto, etc.

The classification of lands in common use being based upon their elevation and the character of their vegetable growth, does not indicate very fully the quality of the soil. There are the hummock, pine and swamp lands. Then there is the high or light hummock, and the low or heavy hummock. Of pine lands, there are the first, second and third rate. The characteristic of hummock land as distinguished from pine, is in the fact of its being covered with a growth of underbrush, while the pine lands are open. Whenever, then, the land is not so low as to be called swamp, and produces an undergrowth of shrubbery, it is called hummock.

The late Dr. Byrne, an old resident of Florida, in a series of letters written in 1860, gives a description of the lands in Florida, so accurate and so well adapted to our purpose, that we copy it nearly entire.

"There is in every State and Territory in the Union, a very large proportion of barren and poor lands, but the ratio of these lands differs greatly in different States. Florida has a due proportion of poor lands; but compared with other States, the ratio of her barren and worthless lands is very small. With the exception of the Everglades, and her irreclaimable swamp lands, there is scarcely an acre in the whole State of Florida that is entirely worthless, or which cannot be made, under her tropical climate, tributary to some agricultural productions. Lands, which, in a more Northern climate, would be utterly worthless, will, in Florida, owing to her tropical character, yield valuable productions. For example, the poorest pine barren lands of Florida will produce, without manure, a luxuriant crop of Sisal Hemp, which yields more profit to the acre than the richest land will when cultivated in sugar, cotton and tobacco. So it is with numerous other valuable tropical products that are adapted to the lands, that in more Northern climates would yield nothing to agriculture. Besides this, there are in Florida no mountain wastes—no barren prairies—and there are but few acres in the whole State not under cultivation; that are not covered with valuable timber."

I shall here give a brief sketch of the different descriptions of the lands in Florida.

Pine lands (pitch and yellow pine) form the basis of Florida. These lands are usually divided into three classes, denoting first, second and third rate pine lands.

That which is denominated "first rate pine land" in Florida has nothing analagous to it in any of the other States. Its surface is covered for several inches deep with a dark vegetable mould beneath which, to the depth of several feet, is a chocolate colored sandy loam, mixed, for the most part, with limestone pebbles, and resting on a substratum of marl, clay or limestone rock. The fertility and durability of this description of land may be estimated from



LAKE MONROE, ST. JOHN'S RIVER.

the well-known fact that it has, on the Upper Suwanee, and in several other districts, yielded, during fourteen years of successive cultivation, without the aid of manure, four hundred pounds of *Sea Island Cotton* to the acre. These lands are still as productive as ever, so that the limit of their durability is still unknown.

The "second rate" pine lands which form the largest proportion of Florida, are all productive. These lands afford fine natural pasturage; they are heavily timbered with the best species of pitch and yellow pine; they are, for the most part, high, rolling, healthy and well-watered. They are generally based upon marl, clay or lime-

stone. They will produce for several years without the aid of manure, and when cow-penned, they will yield two thousand pounds of the best quality of sugar to the acre, or about three hundred pounds of Sea Island Cotton. They will, besides, when properly cultivated, produce the finest Cuba tobacco, oranges, lemons, limes, and various other tropical productions, which must, in many instances, render them more valuable than the best bottom lands in the more northern States.

Even the lands of the "third rate," or most inferior class, are, by no means, worthless under the climate of Florida. This class of lands may be divided into two orders; the one comprising high rolling sandy districts, which are sparsely covered with a stunted growth of "black jack" and pine; the other embracing low, flat, swampy regions, which are frequently studded with "bay galls," and are occasionally inundated, but which are covered with luxuriant vegetation, and very generally with valuable timber. The former of those, it is now ascertained, owing to their calcareous soil, is well adapted to the growth of Sisal Hemp, which is a valuable tropical production. This plant, (the *Agave Sisalana*), and the *Agave Mexican* Hemp, also known as Maguey, the Pulque Plant, the Century Plant, &c., have both been introduced into Florida, and they both grow in great perfection on the poorest lands of the country. As these plants derive their chief support from the atmosphere, they will, like the common air plant, preserve their vitality for many months when left out of the ground.

It is scarcely necessary to add, that the second order of the third rate pine lands, as here described, are far from worthless. These lands afford a most excellent range for cattle, besides being valuable for their timber and the naval stores which they will produce.

There is one general feature in the topography of Florida which no other State in the United States possesses, and which affords a great security to the health of its inhabitants. It is, that the pine lands, which form the basis of the country, and which are almost universally healthy, are nearly everywhere studded at intervals of a few miles with hummock lands of the richest quality. These hummocks are not, as is generally supposed, low, wet lands; they never require ditching or draining; they vary in extent from twenty acres to forty thousand acres, and will probably average about five hundred acres each. Hence the inhabitants have it everywhere in their power to select residences in the pine lands, at such convenient distances from the hummocks as will enable them to cultivate the latter without endangering their health.

Experience in Florida has satisfactorily shown that residences only half a mile distant from cultivated hummocks are entirely exempt from malarial diseases, and that the negroes who cultivate those hummocks, and retire at night to pine land residences, maintain perfect health. Indeed, it is found that residences in the hummocks themselves are generally perfectly healthy after they have been a few

years cleared. Newly-cleared lands are sometimes attended with the development of more or less malaria. In Florida, the diseases which result from these clearings are generally of the mildest type—simple intermittent fever; while in nearly all the Southern States they are most frequently of a severe grade of bilious fever.

The topographical feature here noted, namely, a general interspersed of rich hummocks, surrounded by high, dry, rolling, healthy pine woods, is an advantage which no other State in the Union enjoys; and Florida forms, in this respect, a striking contrast with Louisiana, Mississippi and Texas, whose Sugar and Cotton lands are generally surrounded by vast alluvial regions, subject to frequent inundations, so that it is impossible to obtain, within many miles of them, a healthy residence.

It would seem paradoxical that the malarial diseases of East Florida (abounding as it does in rich hummock lands, and exposed to a tropical sun) should, generally, be of a much milder form than those which prevail in more northern latitudes. That such, however, is the fact, there can be no doubt; for this fact is proved by an aggregate amount of evidence (extending over more than twenty years) which it is impossible to resist. It is suggested, in explanation of this fact, that the luxuriant vegetation which in the Southern and Middle States passes through all the stages of decomposition, is, in East Florida, generally dried up before it reaches the putrefactive stages of decomposition, and that, consequently, the quantity of malaria generated is much less than in climates more favorable to decomposition. This view is strengthened by facts that the soil of Florida is almost everywhere of so porous and absorbent a character that moisture is seldom long retained on its surface; that its atmosphere is in constant motion, and that there is more clear sunshine than in the more northern States. It is further suggested that the uniform prevalence of sea breezes, and the constant motion of the atmosphere in the peninsula, tend so much to diffuse and attenuate whatsoever poison is generated, that it will generally produce but the mildest forms of malarial disease, such as intermittent fever.

The lands, which, in Florida, are, par excellence, denominated "rich land," are first, the "swamp lands;" second, the "low hummock lands;" third, the "high hummocks," and fourth, the "first-rate pine, oak and hickory lands."

The swamp lands are, unquestionably, the most durably rich lands in the country. They are the most recently formed lands, and are still annually receiving additions to their surface. They are intrinsically the most valuable lands in Florida, being as fertile as the hummocks, and more durable. They are, evidently, alluvial and of more recent formation. They occupy natural depressions of basins, which have been gradually filled up by deposits of vegetable debris, &c., washed in from the adjacent and higher lands. Ditching is indispensable to all of them in their preparation for successful cultivation. Properly prepared, however, their inexhaustible fertility

sustains a succession of the most exhausting crops with astonishing vigor. The greatest yield of sugar ever realized in Florida, was produced on this description of land, viz: four hogsheads per acre. That this quantity was produced on Dummitt's plantation, near New Smyrna, is a fact well known to those conversant with sugar planting in East Florida. Sugar cane is here instanced as a measure of the fertility of the soil, because it is one of the most exhausting crops known, and is generally grown without rest or rotation. It is not, however, a fair criterion by which to judge of the relative fertility of lands situated in different climates, for we find on the richest lands in Louisiana the product of sugar per acre, is not more than one hogshead, or about half that of East Florida.

me this
This great disparity in the product of those countries is accounted for, not by any inferiority in the lands of Louisiana or Texas, but by the fact that the early incursions of frost in these States render it necessary to cut the cane in October, which is long before it has reached maturity, while in East Florida it is permitted to stand, without fear of frost, till December, or till such time as it is fully matured. It is well known that it "tassels" in East Florida, and it never does so in either Louisiana or Texas. When cane "tassels" it is evidence of its having reached full maturity. In consequence of the heavy outlay of capital required in the preparation of this description of land for cultivation, and from the facility of obtaining hummock land which requires no ditching nor draining, swamp land has been but little sought after by persons engaged in planting in Florida, and there is now at least a million of acres of the best description of this land vacant in the country, and which can be secured at less than two dollars per acre. Vast bodies of it lie convenient to navigation and railways, and doubtless will soon be sought after with avidity, as soon as the sugar planters of Louisiana and Texas become apprized of its character, and of the many advantages which sugar planting in Florida presents over the same business in any other State in the Union.

Low Hummocks, which, from the nature of their participating in the nature of hummocks and swamps, are sometimes termed *Swam-mocks*, are not inferior to swamp lands in fertility, but perhaps are not quite as durable. They are nearly always level, or nearly so, and have a soil of greater tenacity than that of the high hummocks. Some ditching is necessary in many of them. The soil in them is always deep. These lands are also extremely well adapted to the growth of the cane, as has been well attested by the many plantations which were formerly in operation here on this description of land. There is not nearly so large a proportion of low hummocks as there is of swamp lands.

High Hummocks are the lands in the greatest repute in Florida. These differ from low hummocks in occupying higher ground, and in generally presenting an undulating surface. They are formed of a fine vegetable mould, mixed with a sandy loam, in many places two

feet deep, and resting in most cases on a substratum of clay, marl or limestone. It will be readily understood by any one at all acquainted with agriculture, that such a soil, in such a climate as Florida, must be extremely productive. This soil scarcely ever suffers from too much wet; nor does drought affect it in the same degree as other lands. High hummock lands produce with but little labor of cultivation, all the crops of the country in an eminent degree. Such lands have no tendency to break up in heavy masses, nor are they infested with pernicious weeds or grasses. Their extraordinary fertility and productiveness may be estimated by the fact, in several well-known instances, in Marion county, (Clinch's, McIntosh's, &c.,) three hogsheads of sugar have been made per acre on this description of land, after it had been in cultivation six years in successive crops of corn, without the aid of manure.

To sum up its advantages, it requires no other preparation than clearing and plowing to fit it at once for the greatest possible production of any kind of crop adapted to the climate. In unfavorable seasons it is much more certain to produce a good crop than any other kind of land, from the fact that it is less affected by exclusively dry or wet weather. It can be cultivated with much less labor than any other lands, being remarkably mellow, and its vicinity is generally high and healthy. These reasons are sufficient to entitle it to the estimation in which it is held over all other lands.

The first-rate pine, oak and hickory lands are found in pretty extensive bodies in many parts of the State, particularly in Marion, Alachua and Hernando counties. From the fact that those lands can be cleared at much less expense than the swamp and hummock lands, they have heretofore been preferred by the small planters, and have proved remarkably productive.

There are, besides the lands already noticed, extensive tracts of savanna lands, which approximate in character, texture of the soil, and period and mode of formation, to the swamp lands; differing only in being destitute of timber. Some of these lands are, however, extremely poor.

Probably the largest bodies of rich hummock land in East Florida are to be found in Levy, Alachua, Marion, Hernando and Sumter Counties. There are in Levy County alone, not less than one hundred thousand acres of the very best description of sugar lands; and there is but a small proportion in any of the five counties here cited, that will not produce remunerative crops of Sea Island and Short Staple Cotton, without the aid of manure.

The lands on the St. John's River, taken as a whole, are not as fertile as in some other sections of the State. There are, however, thousands of acres of rich hummock land within a mile of the river, which are as yet unbroken forest, and the pine lands are much better than the average of the whole State. Besides, there is an abundance of muck on the banks of the river and its tributaries, which furnishes a most excellent fertilizer. Lime, marl and shells are also easily obtained, and have been used with very beneficial results.

In Middle Florida, the Counties of Leon, Gadsden, Jefferson and Madison have large quantities of high, rolling hummock land; also the County of Jackson, in West Florida. They are much more undulating than in East Florida, and are underlaid with a stiff red clay, which frequently comes to the surface over large tracts. They are by far the best lands in the State for short staple cotton, to which they have been almost exclusively appropriated. There is in Volusia County a range of low hummock, a little back from the coast, from a half to two miles wide, and extending from the head of the Halifax to the head of the Indian River (some fifty miles), as well adapted to sugar cane as any land in the State. The Gulf hummock in Levy County, comprises perhaps the largest body of rich land in Florida. It was bought up years ago at from five to ten dollars per acre by private parties, by whom it is mostly held at the present time. The Florida Railroad runs through it, and it will no doubt become, at an early day, one of the garden spots of the State. The clearing of the hummocks, however, is expensive, and, as in every new country, we may expect to see the lands more lightly timbered first brought into cultivation.

FACILITY OF COMMUNICATION — EXTERNAL AND INTERNAL.

Florida, from her peculiar geographical position, has advantages for quick and easy communication with all parts of the commercial world, with which few, if any section of the country can compete. In the first place, she has an exceedingly large proportionate coast line. Having an average breadth of only about one hundred miles in the peninsula portion of the State, she extends some four hundred miles from north to south, and thus has a coast line of some eleven hundred miles, with a large number of harbors, bays and estuaries; the easy and certain exit from and to which, largely increase her facilities for communication.

Her relative situation, also, in reference to one of the greatest channels of commercial travel, is of great value. She is thrust directly across one of the great highways of traffic, by her extension southward between the Gulf of Mexico and the Carribbean Sea. By this, so far as proximity is concerned, she may be said to command the commerce of South America, Mexico, Texas, the Mississippi Valley and the West Indies. She is within one and a half days of New Orleans, within three days of New York, and within one day of Savannah and Cuba, by steamer. It is said that a cargo of cotton shipped from Fernandina, or Jacksonville, or St. Augustine, will often reach Liverpool before a vessel from New Orleans or Texas will have reached the Carribbean Sea. It is evident that from her position must result great advantages, both to producer and consumer of the great staples of commercial exchange.

This Hotel is on the north side of Lake Monroe and will accommodate 250 persons is always full from first of November to April and many persons are obliged to camp in tents around and get their meals at the Hotel. Lake Jessup by the St. Johns River is 16 miles south and has for richer lands on its South Side

And the State has an abundance of very good harbors, through which these commercial advantages of position could be improved. Pensacola, Tampa and Fernandina have upward of twenty feet of water; Cedar Keys, St. John's Bar and Charlotte Harbor have twelve feet and upward, while the harbor of Key West is said to have more than thirty feet.

And the means of internal communication are also very good. Many roads, traversing the State in different directions, were made many years since, while the State was under Spanish and English control; subsequently other roads became necessary, during the



BROCK'S HOTEL, ENTERPRISE, ST. JOHN'S RIVER.

protracted Indian wars, and were constructed by the army. The soil of the major portion of the State is so free from stone, the pine forests are so sparse and the soil so porous, that roads are built with comparative ease, and are not very liable to wash. Hence, roads are abundant, though often rather heavy from the sand.

Few portions of the United States are as well furnished as Florida with the means of internal navigation. The St. John's, the Suwanee, and the Apalachicola, are all large streams, navigable for steamboats for more than one hundred miles—the Apalachicola for more than two hundred, the St. John's over three hundred. In addition to these

Warren on Lake Jessup is 16 miles by River & Lake south of the place

G. Darnard

are many others — some, like the Oclawaha, navigable for small steamboats, and others only feasible for small vessels—indeed, so many, that but a small portion of the State is remote from water communication.

The St. John's would be a very remarkable stream anywhere, and seems the more so from the fact that its whole course lies through an extremely level region. It is about four hundred miles in length, is for one hundred and fifty miles of an average width of more than one and a half miles, and carries a volume of water much larger than does the Rio Grande, which is one thousand miles long. Many of its tributaries are navigable to quite a distance by steamboats; and it is supposed that this river and its navigable branches give one thousand miles of water transportation.

The internal communication by means of railroads is remarkably abundant for a State so comparatively new in many respects. There are railroads connecting Fernandina and Cedar Keys, Jacksonville and Quincy, Tallahassee and St. Marks; and Pensacola will, in all probability, be soon connected with Quincy, and also with the roads running north—giving to the West the most rapid and direct route to the Gulf; while another road is in contemplation from Live Oak southward to Tampa, and from Jacksonville to St. Augustine.

Large sea-going steamers ascend the St. John's several times in each week as far as Palatka, from which place smaller steamers ascend the St. John's to Lake Monroe, and the Oclawaha to Silver Spring and Lake Griffin, and the interior lake region. Were a railroad or canal to be built across this small distance intervening between the sources of the St. John's and Indian Rivers, and from Pablo Creek to the South—all of which is supposed could be done for what it often costs to build a single mile of railroad at the North—this State would possess, on completion of the roads already projected, a system of internal communication equal to any in existence.

NATURAL RESOURCES FOR FERTILIZERS.

As has already been remarked, the soil of most of the State is light and sandy upon the surface, although much of it is underlaid by clay or marl, and at no great depth. Hence, to the intelligent immigrant, the natural and convenient resources of the State for manures will be of interest.

The first and most widely-distributed means for restoring and invigorating the fertility of the soil whenever exhausted, is furnished by the swamps, and lagoons, and cypress sinks that may be found in all sections. In many of the swamps and lagoons are to be found large and accessible deposits of what is called muck, which, at the will and leisure of the farmer, may be drawn out and applied directly to the land, or may be composted with lime, ashes, salt or manures;

and thus improved, becomes available to almost any desirable extent. In many of the sinks or depressions where the cypress is found, are similar deposits of vegetable mould or muck; and these sinks, of various dimensions, are scattered throughout the State.

Along the rivers, and the banks of many of the lakes also, are to be found very large and numerous deposits of muck, or mud. Experience in Florida has proved that the muck, used as a fertilizer, under proper management, becomes an exceedingly valuable article; and it is to be found in immense quantities in every section.

There is reason also to believe that the clay itself, which lies underneath and close to the surface of a very large proportion of the sandy regions of the State, is of itself one of the best fertilizers, when applied to and mixed directly with the sandy surface soil. No sufficient and reliable experiments in this direction have been announced; but it is reasonable that such an admixture of soils of different characters will be as beneficial here as at the North, where it has been eminently successful.

The immense deposits of oyster shells that are characteristic of the whole coast line, located in the immediate vicinity of dense forests, giving ample stores of fuel, form another of the sources of agricultural strength of incalculable value, that will be more and more appreciated.

Inland, upon the banks of the rivers and lakes, and sometimes quite inland, are to be seen frequent accumulations of shells (periwinkle and conch) in great bulk, and also of great value—being already, through the operation of the elements, perfectly adapted to immediate and profitable use. These "shell mounds" are often of great bulk, forming very respectable hills, whose origin has excited much inquiry and speculation. Some of the shell mounds on the banks of the upper St. John's are 20 and 30 feet in depth, and near the mouth are oyster-shell mounds that are higher still, and cover acres of land.

Marl, likewise, of varied character and value, is easily accessible in different parts of the State. There are several large deposits within 25 miles of Jacksonville; and a recent discovery has revealed the existence of a very large deposit of green marl in the County of Leon. Without doubt, an abundance of this valuable material will be discovered, whenever a scientific investigation in this direction shall be made.

Thus, it is evident, that with abundant and accessible supplies of clay, lime, marl and muck, under any reasonably skilful agricultural management, an improvement rather than a deterioration of the capacity of the soil may be expected.

PRODUCTIONS.

FIELD CROPS.

In no State of the Union can so extensive a variety of valuable productions be successfully cultivated as in Florida. Most of the crops grown in the temperate zone flourish in the northern portion of the State. Nearly all the Peninsula is adapted to the cultivation of semi-tropical fruits. At least one-fourth of the entire area of the State is south of the line of frost, and will grow successfully the tropical productions of the West Indies. Heretofore cotton has been the principal staple. Indian corn has been largely raised, but not in sufficient quantity to supply the home demand. Tobacco and sugar have been grown to some extent. Of late, however, attention has been turned to other productions, and a new era in the development of the resources of Florida has already commenced. On the St. John's river and along the railroads, the culture of vegetables for the northern markets is receiving much attention, and is no longer an experiment. Fruit growing, hitherto neglected, is being prosecuted with much energy, and cannot fail to become one of our most important interests. There are large quantities of land in Florida yet in a state of nature, admirably adapted to the culture of cane, and there is little doubt that, within a few years, Sugar will become an important staple. In giving an account of the more important productions, we have condensed into a small space much information concerning their cultivation, &c., which those unacquainted with the climate and soil of Florida, will prove, we doubt not, both interesting and useful. We place first on this list,

INDIAN CORN.

It is, to the mass of the people, the "staff of life." It is grown in all parts of the State. On rich bottom lands from fifty to sixty bushels per acre is raised, while on ordinary pine lands, without manure, ten bushels per acre is a fair crop. February is the best month to plant. The common method is to plant in hills, four feet apart each way, thinning out to one or two stalks to each hill at the first plowing. Three plowings are usually given; the last early in June. The hand-hoe is used at the first and second plowings, to cut the weeds not turned under by the plow. It is customary, in the latter part of July, after the Cotton crop has been laid by, to strip off the blades and bind them in bundles for fodder, but we doubt if it will pay at the present cost of labor. During the fall months the ears of corn are broken off and stored in the crib without husking. This is to prevent the depredations of the weevil upon the grain after it is stored.

COTTON.

In 1860 Florida produced 63,322 bales of ginned cotton. The

crop of last year, though much less in quantity, exceeded in value that of 1860, but did not pay the cost of cultivation on the whole.

Without doubt, however, it will continue to be cultivated and to be an important staple, but will not, as formerly, monopolize the capital and industry of the country. Both the long staple or sea-island, and the short staple or upland Cotton are cultivated. There is but little long Cotton grown west of the Suwanee river, except in the county of Gadsden, and scarcely any short Cotton east of the Suwanee. April is the month for planting. Many commence the last of March. The picking season commences the last of August, and continues until Christmas. Two hundred to three hundred pounds of short Cotton per acre is a fair yield upon ordinary soils, but five hundred pounds per acre is not an unusual crop on strong land. Long Cotton produces from one hundred to two hundred pounds per acre as an average crop, but under favorable circumstances, three hundred and even four hundred pounds have been raised. We cannot enter into the details of its culture, and give no estimates upon the cost of cultivation. It is generally conceded that the plantation system must pass away, and the large landed estates be divided up into small farms, to be cultivated in the main by those who hold the title to the soil. This change, of course, is not to be effected in one year or five, but there is reason to believe that this generation, even, will see it consummated. Whether Cotton will continue, under the new system, to be our most important staple, is, of course, problematical, but the conditions under which it will be cultivated will be so different, that an estimate of the cost of cultivation under the present method would be of little value.

SUGAR.

Sugar cane has been cultivated in small patches for home consumption, and to some extent for market. The adaptability of the soil and climate of Florida to its culture has long been known, but owing to a variety of causes, its resources in this direction have hardly begun to be developed. As early as 1823, Vignolles writes as follows:—"Respecting Sugar, the recent successful trials that have been made upon it, have determined the curious fact that it will grow in almost any of the soils of Florida, south of the mouth of St. John's river; the great length of Summer, or period of absolute elevation of the Thermometer above the freezing point, allows the cane to ripen much higher than in Louisiana." Williams, writing in 1837, says: "This (Sugar) ought to be the staple of the country. Experiments in every part of the territory prove that all our good lands will produce Sugar Cane as well as any other crop." Further on he says:—"A general impression has prevailed that Sugar could not be made to advantage unless a great capital is invested; but experience abundantly proves that a small capital may be as profitably employed in the culture of Cane as in any other product." The

truth of the above statements has been proved by recent experiments. A correspondent of the *Evening Post*, writing from Enterprise the past winter, says;—"Sugar cane has been raised with success for many years. I saw on the farm of O. C. Arnett, on the lake, the largest field that I have yet found in the State. He cultivated ten acres. His land is hummock, and has been cultivated without manure for nearly twenty years. Mr. Arnett's crop was not planted until the middle of February, instead of the usual time, between Christmas and the last of January. He banked the earth around the cane throughout the season, leaving a deep furrow between the rows. He has just finished manufacturing his crop, and finds that it has produced at the rate of 1,500 lbs. of Sugar and 300 gallons of Molasses to the acre." Allowing a gallon of Molasses to make five pounds of Sugar, (a low estimate,) and we have 3,000 pounds to the acre from land which has been cultivated without manure for near twenty years. Solon Robinson, who spent the past winter in Florida, gives an extended account of the experiments of Mr. W. W. Holden, of Orange County, in the culture of Sugar Cane, from which we extract the following:—"Mr. Holden's place is upon just such land as composes the great body of East Florida—that is, dry, sandy soil, with clay deep down; the most common growth long leaf pine, (*pinus palustris*), some oaks, hickory, holly, and other trees, and a natural growth of weeds that would astonish a Northern farmer. With good cultivation in a favorable season, Mr. Holden estimates a fair crop of corn at 20 bushels per acre in that vicinity. His crop last year was 17½ bushels per acre. Since the war he has been experimenting with Sugar Cane upon such land as I have described—that is, good, fair quality, sandy pine land; such as gave 17½ bushels of corn to the acre, and this is the result. He had, the past season, 2¼ acres of 'plant cane' (a term used to distinguish it from that which grows after the first year from the ratoons), worked in the same way and to the same amount as he worked his corn; and planted the same distance apart in February. It is usual to make beds for the cane, He did not, but cultivated flat and not as much as would have been profitable. He has (January 15.) just finished grinding, and has 20 barrels of beautiful Sugar, worth 13c. per lb. at the mill, and 11 barrels Syrup, worth 75c per gallon. He uses a three-roller iron mill, driven by a pair of horses, and it requires himself, three men and two boys, ten days to work up the crop." Mr. Robinson estimates the cost of the above crop at \$450. Estimating 225 lbs. of Sugar to a barrel, at the prices mentioned, the crop would amount to \$673.65, or \$388.33 per acre. Beyond question, the ordinary yield of Sugar per acre is, in Florida, nearly twice as great as in Louisiana, and the soil much easier tilled. The Cane produces well from the ratoon, for three to five years, and even longer in the southern portion of the State. Experiments which have been made in fertilizing indicate that swamp muck is one of the very best manures for this crop. Of this there is an abundance

within the reach of almost every man's farm. But there are thousands of acres of rich hummocks yet in a state of nature, which are susceptible of producing, for a series of years, without manure, as fine crops of Sugar as any that grow in the West Indies. The idea has been prevalent that Sugar Making must be conducted on a large scale to make it profitable, but this is an error. "I am now well satisfied," says Mr. Robinson, "that small farmers can grow Cane upon any good pine land by manuring, and can make Sugar as easily as Yankee farmers make cider," and he adds: "Undoubtedly it would be more remunerative, indeed extremely profitable, on a large scale."

SWEET POTATOES.

Next to Indian Corn, the most important article of vegetable food in common use is the Sweet Potato. They do best on a light soil, well manured. The yield per acre is from 100 to 300 bushels, depending upon the season, culture and quality of soil. They are propagated from the seed, like Irish potatoes; from draws, and from the vines. Under the first method, the Potatoes are planted in hills or drills early in the season, and cultivated very much like the Irish potatoes. By the second method, the Potatoes are planted thickly in a bed; when they have sprouted two or three inches, the young shoots, called draws, are broken off and set out in the field. This must be done in damp or showery weather. The third is by cutting off and planting out pieces of the vine, after the plants have commenced running. The crop raised from vines is later, but frequently not inferior, either in quantity or quality, to that raised by the other methods of propagation. The early crop begins to mature about midsummer. The crop is a profitable one, and deserving of more attention, as a market crop, than it has hitherto received. Sweet Potatoes bear shipment well, and always command good prices in the Northern markets.

IRISH POTATOES.

This crop does not produce as well as at the North, but is off in time to be followed by a crop of Sweet Potatoes the same year. They should be planted in January, although good crops are sometimes obtained from later planting. A covering of muck, grass or coarse compost is very beneficial. The Potatoes are fit for digging in May. They can be shipped without difficulty, and at a moderate expense, to the Northern markets, where they are worth eight to nine dollars per barrel. The culture is essentially the same as that practised at the North.

RICE.

There is much low land in Florida well adapted to the culture of Rice. It has been raised to quite an extent for home consumption.

Forty to sixty bushels per acre of rough rice is an average crop. It is not likely to become a staple crop; still, it may be cultivated to advantage in many locations. It is much used as an article of food by all classes.

TOBACCO.

Cuba Tobacco was largely cultivated in the County of Gadsden before the war, and to some extent in other portions of the State; but it is now almost entirely neglected. The cultivation is somewhat tedious. There is no crop that requires so constant attention. Three cuttings in a season are produced from the same stalks. Tobacco is an exhaustive crop, and requires a fertile soil. Still, its cultivation on a small scale may be made extremely profitable. Seven hundred pounds to the acre is an average yield.

INDIGO.

Under the British occupation of Florida, Indigo was the principal staple. It is a sure crop; but its culture has been wholly abandoned. The plant has become naturalized, or is indigenous, and is found growing wild in various parts of the State; and will, doubtless, at some future time, be cultivated extensively.

SISAL HEMP.

Dr. Henry Perine introduced the Sisal Hemp into South Florida some twenty-five years ago, from Yucatan. It is truly a tropical plant. The soil and climate south of the line of frost is well adapted to its growth. Heretofore, the difficulty has been in devising some economical method of separating the fibre from the pulp. A machine has been invented recently, which is cheap, and believed to be efficient. Concerning its culture, the late Wm. C. Dennis, of Key West, says: "It is no longer an experiment here as to the growth of the plant, the amount of the product, or the value of the fibre. It requires no replanting, and very little care after the first year or two. A ton of cleaned hemp can be made to the acre, worth at least \$300 per ton."

CASTOR BEAN.

The Palma Christi, or Castor Bean, grows luxuriantly. In the southern portion of the State it is perennial, and attains the size of a small tree. It is frequently seen in gardens and in waste places. We do not know that any experiments have been made in its cultivation as a field crop; but we deem it worthy of attention. It is likely to become one of our most profitable crops.

SILK.

Much has been said and written about the breeding of Silk Worms, and production of Silk, in Florida. At one time Silk-grow-

ing received considerable attention at St. Augustine. The conditions for a successful prosecution of the business seem peculiarly favorable. The mulberry is a native of our forests. Cocoons of the Silk Worms are often found upon them. The climate is more mild than that of Italy. There is no reason why this valuable staple should not be largely produced.

COFFEE.

We know no reason why Coffee could not be grown successfully south of the 28th parallel; but we have not been able to learn, from any reliable source, that any experiments have been made in its culture. More than forty years ago a Philadelphia Company sent out an expedition to explore the country and select suitable spots for the cultivation of the Coffee plant; but the project was abandoned, Congress refusing the grant of lands required by the Company. If our climate and soil should be found suitable for the culture of Coffee, it could not fail to become, in a few years, an important staple.

TEA.

The efforts which have been made heretofore to introduce the culture of Tea into the United States, do not seem to have met with the success which had been anticipated. The soil of Middle Florida is said to resemble in quality that which is so much sought after in Assam by Tea-growers; and its culture may become an important branch of industry at some future day. Good Tea has been raised successfully at Lake City.

PEAS.

The common English Pea is not cultivated as a field crop. The Cow Pea is extensively grown, and produces excellent crops. It resembles the bean family in the appearance of its foliage and the manner of its growth. It is common to sow them between the rows of corn at the last plowing. They will produce from ten to fifteen bushels per acre, besides a large amount of forage. On account of the luxuriant growth of the vine, on poor soils even, its culture as a green crop, to be turned in, has been recommended.

PEANUTS.

The Peanut, Pinder, Goober or Ground-Pea, as the plant is variously called, grows well on almost any warm, light soil. The seed should be planted early in the Spring. The after cultivation is simple. A hundred bushels to the acre is an average crop. They are worth \$2.50 to \$3.00 per bushel. The nut produces an oil, which is said to be equal to the finest olive oil.

RAMIE.

The Ramie plant has been recently introduced into Louisiana. It is believed it will become an important Southern staple. The plant produces a fibre of fine quality and glossy whiteness, which is used in manufacturing cloths, either by itself or mixed with silk or wool. It is a hardy and vigorous grower, and, in this climate, perennial. The Ramie belongs to the family of *Urticaceæ*, of which the common nettle is an example, and to which the hemp plant belongs. It is claimed that the fibre of the Ramie is stronger than the best European hemp; that it may be spun as fine as that of flax, and that it is doubly durable; that it will produce from three to five annual crops, each equal to the best gathered from hemp. It may be grown with success in any part of Florida.

ARROW ROOT.

The Koonta, or Indian Arrow Root, grows wild in the southern portion of the peninsula. It was formerly manufactured quite extensively; the sole labor consisting of bringing it from the forest lands and conveying it to the mill; the simple stirring occasioned by the digging being sufficient to secure a better crop than the one just removed.

The Bermuda Arrow Root also flourishes, producing, even on pine lands, from two hundred to three hundred bushels per acre. The yield of merchantable Arrow Root Flour, obtained by the imperfect mills, is from six to eight lbs. to the bushel.

WHEAT, RYE AND OATS.

Wheat has been grown in the northern part of the State, but is so uncertain a crop that it is not cultivated. Rye and Oats are raised to some extent, chiefly as forage crops. They should be sowed early in the Winter. Unless the crop ripens before warm weather comes on, very little grain will be obtained.

GARDEN VEGETABLES.

Under this head we shall notice the crops usually cultivated in market gardens, to the production of which the soil and climate of Florida are admirably adapted. The growing of vegetables for the Northern markets has not, until recently, received any attention. In view of the fact, however, that vegetables grown here can be placed in the markets of the Northern seaboard cities from a month to six weeks earlier than from any other point, many have been encouraged to experiment, while some parties have engaged in the business quite extensively. The chief difficulty which has been encountered is that of transportation. Mistakes have also been made in picking too green or too ripe; and careful packing, for shipment, has not received

sufficient attention. The delays incident to transshipment at Savannah or Charleston, have been such that in several instances shipments of Tomatoes have become utterly worthless on reaching New York. This year, however, the connections are closer, and we do not hear so much complaint. There is little doubt that before another season, a line of steamers will run between Jacksonville and New York. This will save from one to two days' time on the passage, besides the injury arising from re-shipment. Direct steam communication will enable the gardeners on the St. John's River to place in the New York market, in good condition, and with little risk, if properly packed, Tomatoes, Cucumbers, Green Peas, Snap Beans, Melons, Green Corn, &c., &c., as early in the season as required, and at a fair profit. We have little doubt that Florida will become, at no distant day, the early market garden of all the Northern cities. Another year will see the business largely increased.*

TOMATOES.

The Tomato is easily cultivated, and produces abundantly. If the soil is not already in good condition, fertilizers should be used. It is bad policy to attempt to raise any garden crop on poor soil. It ripens from May to July. Early lots sell for almost marvelous prices in New York; \$1,200 having been netted from a single acre. Col. Rodman, who has had much experience with this crop, says it will yield from four to five hundred bushels to the acre, in ordinary seasons. By the use of cold frames, there would be no difficulty in having ripe Tomatoes at Jacksonville in March; and by the aid of an ordinary hot-bed, they could be had during the entire winter. South of Palatka they are ripened in the open air every month in the year.

CUCUMBERS.

In May last Florida Cucumbers were quoted at \$10 per hundred in the New York market. At this rate they would be an exceedingly profitable crop. The plant has to contend with few of the enemies which prove so destructive at the North. It is ready for market about the same time as the Tomato, and bears shipment exceedingly well.

MELONS.

There is no country where the Watermelon attains greater perfection than in Florida, and we might add, where they can be raised with less care. The Muskmelon and Cantaloup also flourish. Melons and Cucumbers should be planted in March; April will do, however. For Melons, the first plants being occasionally destroyed by cold

* Our statements as to the time of ripening, &c., of the various crops, apply to the latitude of Jacksonville, unless otherwise stated. As far south as Enterprise, nearly all the vegetables cultivated in a market garden can be ripened any month in the year.

weather. Watermelons being bulky, and liable to injury from handling, are not so well adapted for shipment as Tomatoes and Cucumbers; but thousands have been shipped the past season, and profitably laid down in New York. They are abundant all through June and July.

PEAS.

Soils that contain some lime, quite rich and moderately moist, are the best for Peas. The month of January is the best time to plant. The crop will then be ready for market in April, at which season Green Peas command high prices in New York. They bear shipment well, and will be found a profitable crop.

BEANS.

Beans of all kinds grow well, particularly the Lima Bean, which should be planted early in March. The Lima or Butter Bean, as it is commonly called, is found in almost every garden. Of its value as a market crop, we are unable to speak. Snap Beans are very prolific, and their culture for shipment North is worthy of attention.

CABBAGES AND TURNIPS.

Cabbages succeed best in Winter. Sown in the Fall they will produce fine heads in the Spring months. A rich and moist soil is best suited to the crop. Turnips can be had fresh nearly every month in the year. In the Summer they do not bottom well, but are a valuable Winter crop. Cauliflower, Brocoli and Kohl Rabe are grown without difficulty. The latter is very common in our market.

BEETS, &c.

Beets do best in a deep, rich, moist soil. For Winter use, plant in September or October; for Summer, in January or February. Carrots and Parsnips should be treated in the same manner. None of these crops produce as well as at the North.

MISCELLANEOUS CROPS.

Nearly, if not quite all the vegetables usually cultivated in a good family garden can be raised for home use. Squashes are grown with great ease and of the best quality. Onions grown from "sets" seem to produce best. Lettuce, Radishes, Celery, &c., &c., grow to perfection; also Peppers, Parsley, &c. Asparagus and Rhubarb succeed with the usual attention. The Egg-Plant does finely. Okra is found growing in every garden. It is highly prized by the old residents. The edible part is the green seed pods; from these the celebrated gumbo soup is made. They are also boiled and served as Asparagus.

It may be observed, that with proper care and attention, fresh vegetables may be had for the table every day in the year. For a family to be thus supplied would be desirable, both on the score of health and economy. In warm climates vegetable food is more wholesome than animal, and we urge upon all new comers the importance of giving early attention to the kitchen garden.

FRUITS.

Whatever opinion may be formed as to the adaptation of Florida to the successful cultivation of farm and garden crops, there can be but one opinion as to its fitness for the growth of tropical and semi-tropical Fruits. In this respect Florida enjoys a monopoly which, when fairly developed, will make her one of the richest and most important of the United States. Oranges, Lemons, Pine Apples, and various other tropical Fruits, will yield an average profit of at least one thousand dollars per acre yearly. It is the adaptability of the climate to these productions, that makes even the inferior lands of Florida susceptible of producing crops more valuable than those of the best lands in other parts of the Union. The culture of Fruit in Florida, without doubt, offers greater opportunities for practical and energetic Fruit-growers, than in any other part of the Union. It is the appreciation of this fact that is awakening such an interest in the business, and bringing to our shores large numbers from nearly every State. To supply, as far as possible, the general want of information upon the subject of Fruit Culture in Florida, we have collected the following pages, from the materials in our possession, and from individual observation:

ORANGES.

The Orange belongs to the *citrus* family, in which are included the Lemon, Lime, Citron, Shaddock and similar fruits. The varieties are numerous. In their native state they continue flowering nearly all the Summer, and for a considerable portion of the year. Every stage of growth, from the flower, bud and ripe fruit, can be seen on the same tree. The Sour Orange and the Bitter-sweet grow wild upon the St. John's and Indian Rivers, and in many other parts of the peninsula. A correspondent of the *New York World*, writing from Indian River, says: "The primeval woods on the banks are vast gardens of the sour wild Orange, the juice of which is acrid as vinegar, and when mixed with sugar and water, makes an excellent beverage, that has many tonic qualities, that act as a preventive or cure to the light fevers of the country. These Oranges are to be found in nearly every part of the woods, and we often had to clear the ground of vast quantities of the fruit before we could pitch our tents." The Orange is a sure crop. The tree is long-lived, and has very few enemies. The scale insect (*coccus heoperidum*), which first

made its appearance in 1838, and for a time proved a formidable enemy to the Orange tree, has nearly or altogether disappeared. North of the 30th deg. of latitude, except on the St. John's and Apalachicola Rivers, the crop is somewhat doubtful, being liable to be cut off by frost. Once, indeed, since the settlement of the country (in 1835), the Orange and most other fruit trees were destroyed as far south as the 28th degree of latitude. At that time there were trees growing at St. Augustine more than one hundred years old.

The Oranges of Florida are celebrated for their superior quality. At present the best method of establishing a grove is to set out the wild Orange trees, and, at the proper time, bud it with the Sweet Orange. The sour trees may be dug up at any time during the Winter, and transplanted. They are usually cut off three to four feet from the ground at the time of taking up. During the Summer month shoots large enough to bud will start out; two or three of the best are selected, and the others rubbed off. The buds grow the first year. The tree usually commences bearing the third year from transplanting. By the fifth year a grove well cared for ought to average 100 to the tree. The trees should be set twenty feet apart, which gives about 100 to the acre. Wild trees can be had in Jacksonville at about \$50 per hundred. They are brought from the hummocks on the upper St. John's. When the supply of wild Orange trees are exhausted, as it will be doubtless, within a few years, resort to nursery stock will be necessary. But their propagation is not difficult. Grown from the seed, at the end of three years, the trees will be five to six feet high, and an inch or more in diameter. These should be set out in the orchard and budded, as described for the wild stocks.

The Orange will grow upon almost any soil, but in order to secure good crops, a moderate degree of fertility is required. There is no place where the tree does better than upon the shell hummocks, indicating that lime is a valuable fertilizer. This can easily be supplied in the shape of marl or shells, in any part of the State. Swamp muck is also a good manure.

A grove in full bearing should average five hundred to the tree. Many trees will bear from one thousand to three thousand per year. Mr. C. F. Reed, of Mandarin, raised twelve thousand from three trees the past year—one tree bearing three thousand two hundred, one three thousand three hundred, and one five thousand five hundred. Some of them weighed as high as nineteen ounces. William Edwards, Esq., of Micanopy, has a fine grove of seventy-two trees in bearing, some of which bear from two to three thousand Oranges each.

In Jacksonville Oranges have sold, the past season, at from twenty-five to sixty dollars per thousand. Taking five hundred as the average per tree, and one hundred trees to the acre, and we have fifty thousand Oranges from an acre, which, at forty dollars per

thousand, which may be taken as the average price, will give two thousand dollars; while at twenty-five dollars, the lowest price at which good oranges were sold, we have one thousand two hundred and fifty dollars as the income from a single acre. It requires no great outlay of capital to start an Orange grove, and its care involves no more labor than the care of an apple orchard of the same size. We leave it for parties interested to calculate the profits arising from an Orange grove of ten acres in full bearing. We are quite sure that the credit side of the sheet will show that the profit of growing the Orange is larger in proportion to the expenditure of money and labor, than that derived from the cultivation of any other crop grown in the United States. The largest grove in the State is situated on the East coast, near Cape Canaveral. It is known as Dummitt's Grove, from the name of its proprietor. It contains some one thousand three hundred and fifty trees, which have produced, in a single year, seven hundred thousand oranges. The soil is a light sandy loam, underlaid with a rotten limestone. We believe that this is the only grove in the State exceeding one thousand bearing trees.

LEMONS, LIMES, CITRONS, &c.

It will be unnecessary to go into detail regarding these fruits, since the remarks which we have made with regard to the soil, climate and culture required for the Orange, will apply equally to them. The Lemon is, perhaps, a trifle more hardy than the Orange. The Sicily Lemon, budded on the sour or bitter-sweet orange, does finely. Last fall, R. B. Cram, Esq., of this city, sent to a friend in New York, some specimens of Oranges and Lemons, as samples of what Florida can raise; in the collection was a small branch upon which grew seven lemons. Six of these averaged 13 inches in circumference, and the whole weighed just seven pounds. They were raised by M. I. Phillips, Esq., two miles from Jacksonville.

The lime is a prolific bearer, and a most wholesome and excellent fruit. In South Florida the tree is bearing nearly the whole year. The green fruit makes a fine preserve. They are easily propagated and come into bearing early. Doubtless a good business could be done at raising them for the juice, which is an article of commerce.

The Citron grows on a straggling bush, which requires support while the fruit is ripening. We have seen them six to eight inches in diameter, of a rich yellow color, hanging from the slender branches, fitting emblems of the golden fruits of Autumn. The Citron does well wherever the Orange flourishes.

The Shaddock resembles a large Lemon. It is a coarse fruit, and of little value except for culinary purposes.

The Grape Fruit is similar to the Shaddock.

All the above can be propagated by budding, more easily even, than the Orange.

PEACHES.

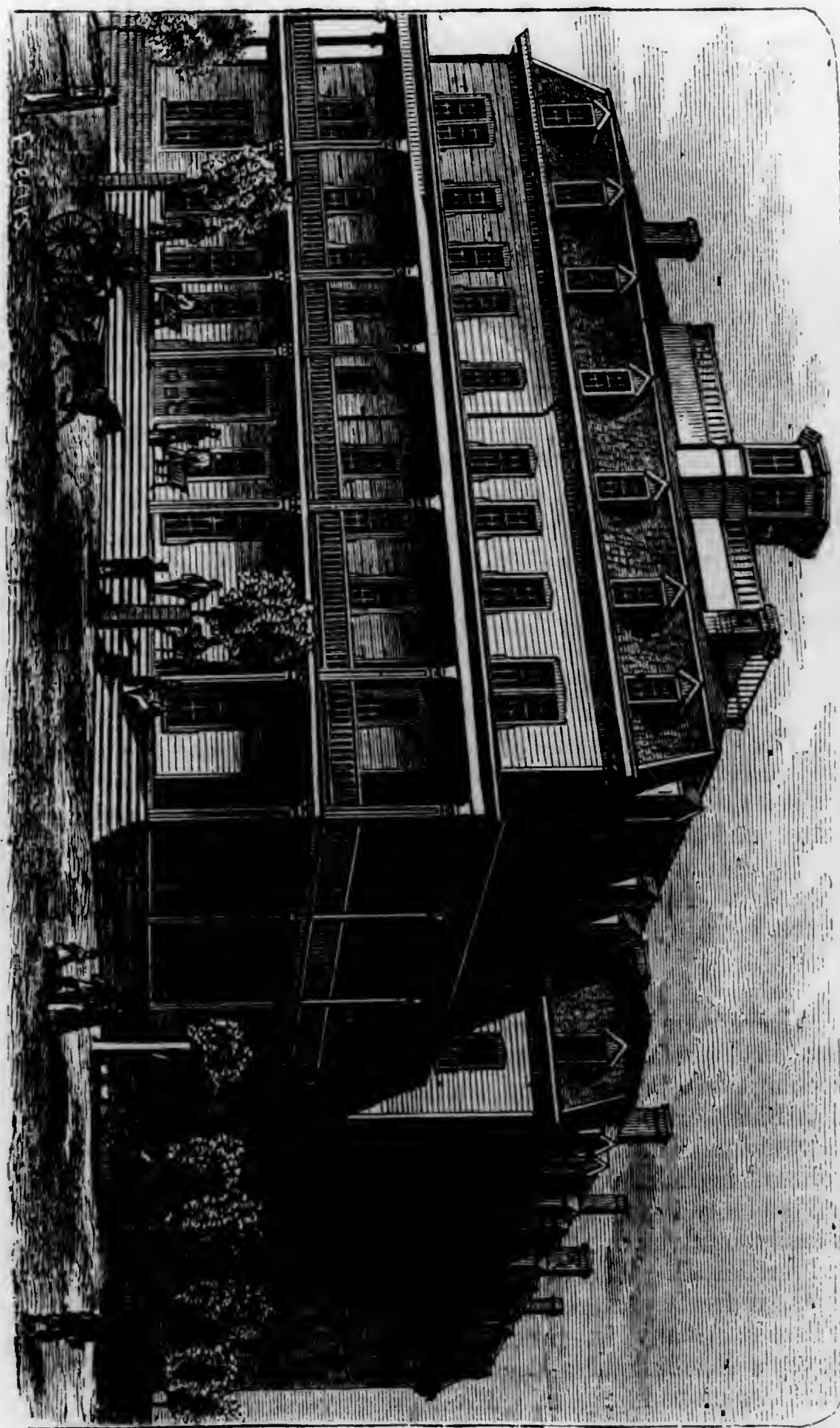
The Peach attains its highest degree of perfection at the South. The trees possess more vigor and greater longevity than at the North. Little attention has been paid to the cultivation of the better varieties, but they seem to do equally well with the native seedlings, from which the greater portion of the fruit brought to our market is produced. So well adapted is the climate to the growth of the Peach, that they are found growing wild by the road-sides and in the corners of the fences. With direct steam communication, there will be no difficulty in shipping them to New York, where, during the months of June and July they would command high prices. D. Redmond, of Augusta, Georgia, late editor of the *Southern Cultivator*, says:—"When the peach tree receives anything like proper culture or attention in our climate, it is liable to no diseases; and is far more thrifty and long-lived than in more northern localities. We have no yellows, nor similar malady; and all that is necessary to keep the tree in perfect health is judicious pruning (shortening in) and frequent stirring of the surface soil around it."

GRAPES.

The South is the true home of the Grape. It is found wild in the forests of Florida, and grows luxuriantly. In the southern part of the State three crops of grapes in a year are gathered. The Black Hamburg, White Muscat, Golden Chasselas, and other foreign Grapes grow and fruit finely in the open air. The Concord succeeds well, and is so much improved that it is nearly equal in quality to the Black Hamburg. The Scuppernong is cultivated more widely than any other variety. It makes a fine wine by the addition of a little sugar; equal to any manufactured in California, as we have been assured by good judges. Over 2,000 gallons have been made from an acre. But little attention has been given to vine culture, and doubtless, varieties may be found better adapted to our soil and climate than any of those mentioned.

FIGS.

Of all the fruits cultivated in the South, says a distinguished horticulturist, the Fig requires the least care, and is one of the most productive and useful. It is propagated readily from cuttings, which usually bear the second year. During the Summer months the Fig may be found upon the breakfast tables of all lovers of fine fruit. When ripe, it is mild, rich and luscious, without being cloying even to those of the most delicate appetite. Being very perishable, it is valuable only for the home market. The dampness of the climate does not admit of its being put up like the figs of commerce.



ST. JAMES'S HOTEL, JACKSONVILLE, S. G. CAMPBELL, PROPRIETOR.

This difficulty may, doubtless, be overcome by artificial means, and would make the Fig an article of great commercial value to the State. A moist and fertile soil is best suited to the Fig; but it grows readily in almost any location. Every one in Florida who owns a foot of land may literally "sit under his own vine and fig tree."

POMEGRANATES.

The Pomegranate is common in Florida. There are the sweet and sour varieties. The bush is a pretty ornamental shrub, and with its beautiful blossoms and pendant fruit, is decidedly ornamental. The rind is very bitter, and has been used as a substitute for Peruvian Bark; but the juice, which is contained in little sacks surrounding the seeds, is a pleasant acid, and is quite agreeable.

APPLES, PEARS AND QUINCES.

These fruits have been cultivated in the northern part of the State, but we cannot recommend them as worthy of general attention. There are instances of the Pear having been grafted on the Wild Hawthorn, with good results. The Quince, too, may succeed moderately well, under favorable circumstances.

PLUMS, CHERRIES, &c.

The Plum grows wild all over the State, and some of the varieties are scarcely inferior to many of the cultivated sorts. The tree is not subject to "black knot," or other serious maladies. Doubtless the better varieties can be successfully worked on the wild stocks. The Cherry does not succeed well. The Currant, also, has been reluctantly discarded. Apricots and Nectarines succeed quite as well as the Peach.

BERRIES.

There is no place where the Blackberry is more perfectly at home than in Florida. The running variety, or Dewberry, commences ripening early in April, and continues in bearing till May, when the high Blackberry comes on, and continues in bearing until July. The Lawton was fruited by Dr. Sanborn, last year. He says: "It did well, but needs moist ground." The Huckleberry grows everywhere, and is plenty in market during the month of May. The Strawberry is easily cultivated, and bears abundant crops. It requires a moist and fertile soil. The fruit commences ripening in March; and the vines, if freely watered, will continue in bearing for six months. Wilson's Albany is, perhaps, the best variety for this latitude. Hovey's Seedling also does well. The Mulberry grows wild, and bears two crops in a year. The Northern Gooseberry and Cranberry do not succeed.

THE OLIVE.

The Olive has been successfully cultivated, and is deserving attention. Trees grown from the seed commence bearing the tenth year, and are fully productive about the twentieth or twenty-fifth.

THE BANANA AND PINE APPLE.

In all the southern portion of the peninsula, the Banana does finely. In the northern part of the State they require protection in Winter. The Pine Apple also succeeds admirably in South Florida. It and the Banana are raised from suckers, which come into bearing about eighteen months after being planted. The stalks die after fruiting, and give place to suckers, which spring up around the parent stalk. The Banana grows to the height of ten feet; the Pine Apple to a height of about three feet.

MISCELLANEOUS.

Of strictly tropical fruits that are worthy of attention, in addition to those above noticed, may be mentioned the Guava, Sappadillo, Sugar Apple, Tamarind, Alligator Pear, Pawpaw, Plaintain, Coconut, and perhaps the Date. All the above we have seen growing luxuriantly in South Florida. The Coconut is a large tree, rising above all the other trees of the forest. The fruit is ripening the year round. The Pecan-nut can be raised without difficulty; and the Almond.

There is a broad field for experiment in connection with the productions of Florida. She is still a *terra incognita*, to a great extent. Her capacities are comparatively untested and unknown. They await the hand of industry, enterprise and skill to develop them, and to make the "land of flowers" not only the most salubrious, but in the variety and value of its productions the most wealthy portion of the Union.

STOCK RAISING.

On much, even of the poorer land of the State, is to be found a large growth of oaks, scattered among the pines, which furnishes abundance of mast—on which, in the genial climate of Florida, with little care or protection, hogs can be raised *ad libitum*. They are to be found everywhere, throughout the forests of the whole peninsula, half-wild, and in good condition; finding easily an independent support. Kept, or rather unkept, as they are, they are a nuisance; but the fencing in of a sufficient "range," and the occasional distribution of a little feed, would enable a farmer to raise hogs enough to furnish a considerable revenue.

The whole territory is likewise covered with a more or less thick coat of divers wild grasses, which retain their greenness to a greater or less extent throughout the year. Cattle maintain themselves in

good condition entirely without care. In the southern portion of the peninsula are found large moist prairies, called savannas, covered with tall grasses, which afford very good nutriment for cattle. Upon them large herds of cattle pasture, which are driven up occasionally by their owners, the beeves selected out, and the calves marked. Capt. McKay, of Tampa, has been engaged in the cattle trade for a number of years, running a line of steamers to Cuba two or three times a month, loaded with Florida beeves. During the war, the Confederate authorities drew large supplies of beef from Florida. Some of the heavy cattle men own as many as 25,000 head, and have made fortunes out of the business.

Sheep also do well in Florida. It may be doubtful if as fine a quality of wool could be raised as far to the north, but the mutton is of a superior quality.

Whether any of the so-called tame grasses can ever be successfully cultivated in Florida, and if so, what are the best varieties, never seems to have been satisfactorily determined. But, though not as yet sufficiently tested by actual experiment, the abundant growth of the wild grasses throughout the forests, and the fact that the corn fields, between the last hoeing and the harvest, often show a growth of grass called Crab Grass, sufficient, if cured, to make a ton, or a ton and a half, to the acre; of rich and succulent fodder, sufficiently indicates the adaptability of the State to the growth of tame grasses.

TIMBER AND LUMBER.

Florida is, beyond question, the best timbered State in the Union. Out of about 38,000,000 acres, only some 3,000,000 are included in farms; and of the rest, nineteen-twentieths, exclusive of the area covered by rivers and lakes, is covered with heavy forests. On all the least moist and more level portions, the Pine is the prevalent forest tree; either the yellow or the pitch pine. It grows with great beauty, and attains a large size—furnishing some of the handsomest Pine lumber to be found in the markets of the world. The extent of the Pine lands, and the possible amount of lumber that could be manufactured, would be almost incredible to one who has never visited Florida. There are probably more than 30,000 square miles of heavy Pine forest within the limits of the State.

In the moister lands, along the rivers and creeks and on the margins and swamps, an almost infinite variety of trees are to be found, of which the more valuable for timber and lumber are Live Oak, White Oak, the Hickory, the Ash, the Birch, the Cedar, the Magnolia, the Sweet Bay, and the Cypress. Of all these varieties, a great abundance is to be found throughout the State. Of Pine of the best quality, of Cedar and Cypress in particular, the supply for any purposes of manufacture may well be said to be inexhaustible. The larger proportion of what has loosely been called swamp, in Florida, is simply low hummock, with a soil of inexhaustible fertility, and

covered with a dense growth of mainly Cypress, Magnolia and Sweet Bay. The timber of the Cypress more nearly resembles that of the Northern Basswood than anything else. It is not quite as close-grained, perhaps, but it is about the same weight and toughness, and is fully as easily worked, and can be used nearly as well for all the purposes to which Basswood is applied. It is more easily split than Basswood; but it is, with that exception, as susceptible of being warped and bent into desirable shapes. For clothes-pins, for fork and rake and broom handles, and for pails and tubs, Cypress furnishes an excellent material; while the Red Cedar of the coast and swamps and rivers, would yield the best known material for the pails and tubs of a nicer and more costly description.

The timber of the Magnolia, also, is susceptible of a variety of uses. Similar to Basswood in color and fineness of grain, it can be brought to a fine polish, and is already being used for the nicer and finer kinds of wheelwright and cabinet work. Of this timber the supply is very large.

The wood of the Red or Sweet Bay, in fineness of texture, and in its other valuable qualities, stands next to Mahogany, and will, ere long, be in demand for cabinet work. It abounds in the State.

The resources of Florida in the direction of the manufacture of wooden ware, and of tools of all descriptions made from wood, have not only as yet never been developed, but have hardly been suspected. If an inexhaustible abundance of material, at the cheapest possible rates, and very great accessibility by water communication, are of any value and importance in promoting the success of wooden manufacture, then this bids fair to become a leading industrial pursuit in this State.

Soon after the close of the war, the business of manufacturing Lumber was overdone, and was engaged in by many unaccustomed to the work; consequently, failure of course occurred, and many mills stand idle. Whoever shall purchase these mills and convert them first into manufactories of wooden ware, will have an excellent prospect of a large and lucrative business.

GAME AND FISH.

The great abundance of Oysters, Fish and Game to be found in the greater portion of the State, forms an inducement of force, with many, both on the ground of business and economy, as well as on account of the opportunity afforded to sportsmen. Everywhere on the coast, both of the Ocean and Gulf, excellent Oysters abound. The Oysters of St. Andrew's Bay are celebrated through the South; and those of Indian River are larger, finer, and still more abundant. And off more than half the Florida coast, Turtle in immense quantities and of great size are continually taken. But the capacity of these waters for Oysters and Turtle is almost inexhaustible.

Fish, too, of the best quality, is to be found on all the coasts and in all the lakes and rivers; forming a cheap, easily-attainable and very wholesome article of diet, and giving opportunity for business in this direction to almost any extent. It is no exaggeration to say that the bays and inlets, as well as rivers of Florida, swarm with valuable fish. Mullet, Bass, Sheepshead, Trout—salt water and fresh—and innumerable other varieties, abound. And latterly it has been discovered that very valuable Shad fisheries may be carried on in various localities.

Turkeys, Ducks, Squirrels, Deer and Bear are to be found throughout the State, and perhaps no part of the United States can furnish a more exciting or agreeable winter hunting ground than Indian River and the Gulf Coast.

While the larger portions of the North and West are covered with snow, and the frost holds absolute and iron sway, the hunter in the Indian River Region may comfortably camp out, month after month, with a single blanket, taking as he needs, his Sweet Potatoes from the ground, and the Orange, Lemon and Banana from the plantations along the route, and in the continuous sunshine of an unending Spring, surfeit himself with the pursuit of game.

The gathering of Sponge, and the taking and preservation of Fish, Game and Turtle for the northern market, pursued somewhat in the past, are bound, in the future to furnish lucrative occupation to the labor and enterprise of multitudes.

Key West is the headquarters of the Sponge business. Large quantities are annually gathered in the shallow waters along the coast. The Key West *Dispatch* says that over four thousand dollars worth of Sponge have been shipped from that port within the last two months. These shipments do not include the finer quality, known as the sheep-wool, but are confined to the grass and glove Sponges alone. The recent impetus to this business gives employment to two hundred men and boys, thus affording those fond of "sponging" an opportunity of engaging in it in a profitable way.

SALT.

The manufacture of Salt was carried on all along the coast during the war, and to some extent at the present time. The late Wm. C. Dennis, Esq., of Key West, had just completed at the commencement of the war, extensive Salt Works on the Island of Key West, for the manufacture of Salt by solar evaporation. Mr. Dennis had given much attention to the subject, and was confident of success, but the war coming on, the business was abandoned. The water of the Gulf is said to be saltier than that of the Atlantic, and all along the coast are excellent locations for extensive Salt Works.

NAVAL STORES.

The extensive Pine forests of Florida already furnish employment to a large number engaged in the production of Naval Stores. In 1866 over \$100,000 worth of Spirits of Turpentine was manufactured; also large quantities of Resin. The trees in Florida have a much longer running season than those of North or South Carolina. They are boxed in the Winter. On the approach of warm weather they commence running, and continue until cold weather in the Fall. The crude Turpentine which collects in the boxes is removed every month. It is worth about 75 cts. per cwt., wherever there is a still. One hand will take care of 12,000 boxes, which will yield 50 bbls. of Spirits of Turpentine and 200 bbls. of Resin, in a good season. Rail or water transportation should be near at hand, as freight is an important item. The business has been yearly increasing, and has been remunerative.

Without a doubt, Hemp, in all its varieties, may be grown in Florida with abundant success. It grows luxuriously elsewhere under similar, or even less favorable circumstances of soil and climate. Some accounts of Sisal Hemp, by Wm. C. Dennis, of Key West, Fla., taken from the Patent Office Report, is inserted here as possibly a matter of interest, and likely to become a source of profit to our citizens:

"Dr. Henry Perine, who was for a time Consul at Yucatan, among many other exotic plants, introduced into the Southern part of this State the Sisal Hemp (*agave sisalana*). He also introduced two other species of the agave, which, from their hardy, self-propagating natures, not only survived the effects of the change of climate, but increased rapidly, until they were destroyed by the Indians, in 1846. One of them was the "pulque plant," from which is manufactured, in Mexico, the celebrated domestic drink of that country; and the other was the "Great American Aloes," or "Century plant" (*agave Americana*), the fibre of which is manufactured into cordage and various other articles of use. Of these three kinds of agave, so far as I know, the Sisal Hemp is the only one which appears to be of much importance to us in an economical point of view; although further acquaintance and experiments may prove the other two likewise valuable, especially the latter.

"The gigantic plant out of which Sisal Hemp is made, delights in arid, rocky land, which contains a superabundance of lime. This is precisely the condition of the soil of these Keys and the southerly part of the peninsula of Florida, where, alone, it could be cultivated in the absence of frost. It requires less culture than other products, but is much benefited by keeping down the weeds; and although it grows best on lands which have the deepest soils, yet it grows where

there is but little soil that appears among the rocks, sending its long, penetrating roots into the clefts and crevices of the rocks in search of black, rich vegetable mould. In fact, the lands on these Keys, and much of it on the southern point of the peninsula, are nearly worthless for every other agricultural purpose, so far as is known; yet there are thousands of acres in this region where a ton of cleaned Sisal Hemp can be made to the acre yearly, after the plant has arrived at such an advanced stage as will allow the lower leaves to be cut from it—which takes, in this climate, from three to five years to grow, according to the goodness of the soil, and the attention given to keep the lands clear of weeds, grass, etc. It is no longer an experiment here as to the growth of the plant, nor of the amount of the product; nor is there any longer a doubt as regards the value of the fibre—a number of tons of it having already been collected and sent to market, where it readily brought within a half cent to a cent per pound as much as the best kind of Manilla hemp; that is, in the neighborhood of \$250 per ton. About a thousand plants should be set on an acre; and from many young ones coming up from the long lateral roots, if these be kept at proper distance, it will be seen that the same lands will require no replanting, if coarse vegetable manure be applied from time to time. After the plant is of sufficient growth, the lower leaves are cut off, at proper times, leaving enough on the top to keep it healthy. These leaves are composed of a soft watery pulp, and are from two to six feet long, and in the middle from four to six inches wide, being frequently three inches thick at the butt, having the general shape of the head of a lance. They contain a gum, which is the chief cause of their being rather troublesome in separating the fibres from the pulp. Neither the epidermis nor this pulp is more than a powder, after becoming dry, if the gum be entirely crushed and washed out. This is a most important fact in relation to the manner to be adopted to cleanse the fibres from the pulp. As these are continuous and parallel, and embedded in it, I feel certain that a system of passing the leaves through a series of heavy iron-rollers, firmly set, something after those used in grinding sugar-cane, and throwing water upon the crushed leaves, in jets or otherwise, in sufficient quantities to wash out the gum (which is perfectly soluble in it), will thoroughly clean the fibres without any loss; so that after they are dry, and have been beaten to get out the dust, they will be fit for market. At any rate, the right plan for separating the fibres has not yet been discovered, although there has been enough done at it to show that they can be got out at a profit. Here the people either preserve the primitive plan which is practised in Yucatan, of beating and scraping the leaves, or simply crush them with a pair of rollers, afterwards steeping the crushed ones in an alkaline solution for a few days, and then clean the fibres by a kind of combing process. But either scraping or combing destroys too many of the fibres by breaking them, which would not be done by a system of rolling and washing out the gum. In Yucatan they fer-

ment the beaten leaves in water or mud; but this stains and weakens the fibres, so as to reduce their value, I believe, more than half. Even steeping the crushed leaves in an alkaline pickle, although it may not weaken the fibres much, as the juice of the leaves is acid, destroys that silky gloss which they possess when got out of the fresh leaves.

ROUTES AND EXPENSE.

The usual, and perhaps the cheapest, and upon the whole the most comfortable route to Florida, is by steamer from New York, direct to Fernandina or to Savannah, and thence to Jacksonville. Settlers coming by this route, can forward their heavy baggage and household furniture by sailing vessel from New York, or Boston, or Philadelphia.

Another route is by railroad, *via* Washington and Richmond, to Charleston or Savannah, and thence by steamer to Jacksonville; or by railroad the whole distance. The latter is most rapid; but least comfortable, and most expensive. By steamer, the expense from New York is from \$28 to \$35, and by the all-railroad route would probably be \$50. These routes require from three to five days.

A cheaper route would be by sailing vessel from any of several of the Northern ports, from which vessels are frequently clearing for Florida, seeking freights of lumber. Many of the vessels are neat and roomy, and easily could, and if required, undoubtedly would, afford very comfortable accommodations for passengers. The expense by this route would be much less than by any other, and passengers, at little cost, could bring with them their household goods and furniture, and the thousand articles of comfort that are as desirable as they are expensive to replace. A passage thus by sailing vessel, would require, upon an average, some ten days; although within the past season, vessels have made the passage by sail from New York in five days. The accessibility of Florida by such a variety of routes is not the least recommendation she can offer to those proposing to change their location.

TIME OF STARTING.

As far as the mere question of preparing for business, whether agricultural or other, or of engaging in it is concerned, an arrival at any time within three months after September 1st is well enough, but on account of health and comfort, the immigrant should so time his departure as to arrive in October, November or December.

Thus he will escape the severe weather of the most uncomfortable season of the year at the north, and will have opportunity for

partial acclimation during the season which is most favorable to health here. The continuous warm weather of June, July and August is somewhat trying to the vigor of even long residents, and would be much more so to new comers. Any predisposition to fever or bilious complaints generally, would be aggravated by an arrival before the 1st of September, and in any event, it would be more prudent to avoid any such danger.

Again, if one is disposed to settle upon new land, time will thus be given to clear and prepare for a Summer crop whatever land is desired; while if the settler prefers to purchase an improved farm, he will then be in season to put in a Winter crop of vegetables or grain, or to establish his vineyard or fruit orchard as he chooses.

PRICES OF LANDS.

It is difficult to give satisfactory replies to the many questions in reference to the price of lands. In fact, land is from one dollar and twenty-five cents to one hundred dollars per acre. There are in the State, probably, 18,000,000 acres of U. S. Government lands, all of which are open to entry under the homestead law. While much of these lands and those most accessible have already been entered, there is still an immense amount of very good land upon which settlers can effect entries for homesteads.

There is also a large amount, probably more than 6,000,000 acres of land, belonging to the State, which is open to purchase at from one dollar and twenty-five cents to five dollars per acre. Of this, also, only the less accessible is in the market. Here, as in the other sections of the country, the value of land in the market depends upon its vicinity to the villages and cities, and upon its facilities for communication, as much as upon its intrinsic worth. Plantations that are partially cleared and having improvements, such as buildings and fences, are worth from three to ten dollars per acre. Along the St. John's, improved lands, especially those in the vicinity of Jacksonville and Palatka, are much higher. Lands having Orange groves in bearing, while estimated at from fifty to one hundred and fifty dollars per acre are scarcely to be bought at any price.

Average Pine land, somewhat removed from the settlements, can be purchased in small lots at not unreasonable prices, and in large lots can be had at a very cheap rate. Colonies of immigrants by combination, could thus buy homes for all at a slight expenditure.

The value of lands of all kinds, is rapidly increasing in the more desirable portions of Florida, and the successful reconstruction under the new Constitution, will add rapidly to the enhancement of prices.

Much of the choicest land in the State---that which was selected years ago by men most familiar with the quality of land, has, for

many years, remained in the hands of the original grantees of the Spanish and English Governments, or their heirs. These grants were, many of them, of enormous extent. A vicious and unequal system of taxation, loosely administered, has hitherto favored this long-continued sequestration of the more valuable lands. Belonging to non-resident parties, difficult of access and never fairly assessed, they have measurably escaped taxation on that account. They have constituted a practical land monopoly of the worst description, and have operated largely to obstruct the settlement of the immense territory of the State.

But the new Constitution, adopting an equitable and impartial system of taxation, by which the burdens of the State Government will be equally borne by all the property of the State, will, in its just and legitimate operation, very soon compel a fair valuation and taxation of all those immense vacant and unproductive tracts, and thus they will come into market, and make possible the rapid development of the agricultural resources of the State.

Generally, it may be said that the price of land need be no obstacle to deter the immigration of any---an abundance of good land can be had at reasonable prices.

BUILDINGS, THEIR CHARACTER AND EXPENSE.

As is true of all other newly settled regions, the customs and fashions prevalent at large, do not require as expensive a style of dwelling houses or places of business, as in older-settled sections, and in consequence of this, as well as on account of the mildness of the climate, the strong, tight, and expensive houses of the North would be not only not needed, but would, in fact, be out of character.

A man who would feel constrained, in order to sustain a character for respectability as a reputable farmer at the North, and indeed, in order to make his family comfortable throughout the rigorous winters there, to expend from \$1,500 to \$2,500 for a farm dwelling house, would not require, and indeed would not think of expending more than \$500 to \$1,200 for a dwelling house in Florida.

A very large proportion of the dwelling houses in Florida, not only on the farms and plantations, but in the towns and villages, are built by covering a frame with a weather-boarding of common boards, nailed on vertically and then battened, while the inner partitions are made in the same way, or lathed and plastered, as the occupant chooses. And these simple houses, neatly white-washed, with their invariably roomy piazzas, so entirely indispensable in this climate, and looking out through the dark shade of the oak, the magnolia, the oleander, or the china tree, are not only pleasant to the eye, but thoroughly comfortable and sufficient for ample protection against the severest weather ever known here.

One peculiarity of the dwelling houses in Florida, that attracts the attention of all strangers, is that they are destitute entirely of cellars. The houses are built upon wooden posts or brick pillars, standing elevated some two to four feet above the surface of the earth, and thus giving ample opportunity for that thorough ventilation which is essential to health and comfort. Occasionally a small cellar can be found, but they are very rare. Thus the settler is relieved from a heavy item in the necessary expense of building a house at the North.

COST OF CLEARING LAND.

The cost of clearing land varies as much as the price of land. What are called "Low Hummock" lands are exceedingly rich, and while they give, when cleared, a soil of great depth and of inexhaustible fertility, they are covered with the densest conceivable growth of trees, shrubs and plants. The trees are large and stand thickly together, and with the undergrowth form an almost impenetrable mass of vegetable growth. To clear thoroughly such land requires much labor, of course. Probably the strong, thick, "low hummock" will cost in clearing, from twenty to forty dollars per acre.

The pine lands are more easily cleared. The trees often stand at some distance from each other, and a common preparation of these lands, for cultivation, is made by girdling the trees and cutting out the undergrowth. The year after girdling, the tops of the trees are dead and offer no impediment to the rays of the sun, and a crop may be planted, the trunks remaining to be removed at leisure. These lands can be cleared at slight expense, costing from two to five dollars per acre.

Excepting the treeless Western Prairies, there are no lands of average fertility in the whole country that can more easily, cheaply and rapidly be prepared for crops, than the pine lands of Florida. A new comer, arriving in September or October, can, with a little expenditure, within twelve months, transform a piece of wood tract into a field waving with a various and valuable harvest.

WAGES OF LABOR.

There is a scarcity of field labor in some parts of the State, particularly the more remote, on account of the strong disposition of the Freedmen, who constitute so large an element of the field laborers, to gather together and in the immediate vicinity of the larger towns. Still, proprietors that deal honorably and kindly with their help, are seldom at loss for such help as they need.

The ordinary method in the employment of field hands is to hire by the month, giving a certain agreed price, and adding the usual rations; and the rate of wages per month has been, during the current year, from ten to eighteen dollars with rations, which are estimated to be worth six dollars per month additional. Field and other manual labor, by the day, has been worth from seventy-five cents to one dollar and fifty cents.

Skilled labor of mechanics of all kinds is in demand at a fair compensation, say from two dollars to three dollars and fifty cents per day. Job-work, by all kinds of mechanics, is charged at a much higher rate comparatively.

The State is much better provided with all kinds of professional skill, than of mechanical. The professions of Law and Medicine are largely represented; but good Blacksmiths, Carpenters, Masons and Shoemakers would find abundant employment.

A good man, with either a profession or a trade, can easily and profitably carry on a small farm or garden, thus saving all lost time, and contributing to the necessary expenses of his family.

So much has been said of the vast scope of vegetable growth in Florida, that it is a cause of surprise to all strangers, and suspicion to many; as though there might be well-grounded suspicion of exaggeration or over-statement. On this account it is deemed best to refer to some of the older and standard writers on this subject.

In the "Observations" of Charles Vignolles, published in New York in 1823, on page 99 we find the following:

"The following list of productions capable of being raised in Florida, has been made out with some pains; and it is believed all these stated are profitable and practicable articles:

ORANGE, various kinds,	CURRENTS, Zante,	PIMENTO,
LEMON,	PINE APPLE,	SAGO PALM,
LIME,	FIG,	RED PEPPER,
CITRON,	PLANTAIN,	SAPONICA,
SHADDOCK,	BANANA,	JESUITS' BARK,
MANGO,	YAM,	BESINE,
PAWPAW,	BREAD FRUIT,	PALMA CHRISTI, Castor
COCOA,	ARROW ROOT,	Bean,
DATE,	GALLNUTS,	TEA,
SWEET ALMOND,	DOLICHOS, or Soy-lean,	SUGAR,
BITTER ALMOND,	JALAP,	TOBACCO,
PISTACHIO,	TREE RHUBARB,	RICE,
ACUAGUA,	GINGER,	COTTON,
GUM GLENI,	GUM GUIACUM,	SILK,
FUSTIC,	BRAZILLLOTTE,	CORK OAK,
BALSAM,	SENNA,	CHESTNUT,
HEMP,	TURKEY MADDER,	SASSAFRAS,
CAMPHOR,	BALM OF GILEAD,	SARSAPARILLA,
FRANKINCENSE,	CLOVES,	TREE OPIUM POPPY,
LEECH PLANT, of China,	LIQUID AMBER,	TUMERICK,
THE OLIVE,	ALOE,	NUTMEGS.
THE VINE, all varieties,	CINNAMON,	

In a treatise upon "The Territory of Florida," by John Lee Williams, published in New York in 1837, beginning on page 76 is a long and minute statement of the various productions of the soil—much too long for insertion entire. From it is taken a list arranged as by him in reference to the various soils, as pine-barrens, uplands, hummocks, swamps and marshes, but from which many things mentioned by Williams are excluded. It is only necessary to add that Mr. Williams spent the major portion of his life in Florida, and died there. He was personally familiar with what he states of the productions of the State.

PINE BARRENS.

TREES.—Pine (Pitch and Yellow), Oak, High Willows and Black Jack.

SHRUBS.—Haw, Huckleberry, Whortleberry, Blueberry, Wild Sunflower, Golden Rod, Aster, Wild Pennyroyal, Origanum, Wild Indigo, Balsam, Skullcap, Silk Weed, Sensitive Plant, Blackberry, Dewberry, Strawberry, Verbena, &c.

VINES.—Muscatine Grape, China Briar, Cypress Vine, Woodbine, Yellow Jessamine, &c.

GRASSES.—Nut Grass, Cockspur, Crab Grass, Bermuda Grass, Broom Grass, Oat Grass, Crowsfoot, &c.

UPLANDS.

TREES.—Oaks (Black, Red, Yellow, Spanish, Post and White), Yellow Pine, Hickory, Poplar, Dogwood, Magnolia, Wild Cherry, Persimmon, Holly, Sassafras, Mulberry, Black Gum, Scarlet Maple, Locust, Beech, Chestnut, Birch, Ironwood, Sycamore, White Ash.

SHRUBS.—Chinguapin, Myrtle, Prickly Ash, &c.

HUMMOCKS.

In addition to those mentioned as growing on Uplands:

TREES.—Sweet Bay, Olive, Cabbage Palm, Cotton Tree, Juniper, Red Cedar, Sweet Gum, Live Oak, Saponaria.

SHRUBS.—Azalia, Haw, Hydrungia, Sumach, Sensitive Plant, Skullcap, Cassia, Senna, Lobelia, Indian Tobacco, Cancer Root, Indian Agave, Ranmiculus, Poppy, Mallow, White Nettle.

VINES.—Fox Grapes, Bignonia, Woodbine (Crimson and Yellow,) Supple Jack.

SWAMPS.

TREES.—Cypress, Swamp Ash, White Ash, Black Ash, Water Oak, Loblolly, Magnolia, Poplar, Plane Tree, Soap Tree.

Nine-tenths of Mr. Williams' list has been omitted, but enough is already quoted to show the great variety of trees and herbs most commonly grown in Florida. The same author goes on to say: "On approaching the 27th degree of north latitude the whole vegetation begins rapidly to change. Oaks and Yellow Pines become rare, and, at length, disappear," and, as he asserts, other trees take their place, among which he mentions the Mangrove, (black and white,) Lignum-Vitæ, Mahogany, Logwood, Wild Cinnamon, Gum Elemi, or Gumbo-limbo, or India Rubber, Satin Wood, Mastic, Buttonwood, Red Bay, Bay Cedar, Cocoanut, Palm, &c.

Among the crops mentioned by Williams, susceptible of successful cultivation are Cotton, Cane, Tobacco, Rice, Indigo, Silk, Cochineal, Corn, Sweet Potatoes, Shaddocks, Oranges, Pomegranates, Figs, Peaches, Cocoanuts, Plantains, Bananas, Tamarinds and the Olive.

The above extracts from sober historians, whose labors were stimulated by unselfish devotion to the investigation of truth, and whose conclusions were promulgated in the interest simply of general information, sufficiently corroborate the statements herein made.

The foregoing is prepared for the purpose of giving a general knowledge of the State—its character, soil, climate, productions and capacities—in order fairly to set forth the inducements actually offered to settlers. The same will also constitute the first portion of a larger treatise, which it is proposed to make amply adequate to supply the more full and detailed information in regard to different sections and various crops, which will be required by actual immigrants, who need the data that will thus be furnished, for a discriminating selection of desirable locations.

An effort will also be made to give such description of particular points of interest and attention, as will constitute of the complete book a comprehensive hand-book for transient visitors in search of health or amusement.

The first part will be prepared for gratuitous circulation, and the whole will be published in a form as compact and convenient as possible; admitting a limited number of advertisements to assist in defraying the necessary expense; and will be sold at the lowest practicable rate—thus relieving the State to some extent.

J. S. ADAMS,

Commissioner of Immigration.

off 17 #

Office of the Commissioner of Immigration,

JACKSONVILLE, FLA., *March*, 1870.

THIS book will be forwarded to all who apply, and send the necessary postage. For those who desire fuller information in regard to most desirable locations for particular crops, or in furtherance of special purposes, reference is made to "THE FLORIDA COLONIST," which will soon be published and will contain much matter of interest to every settler or visitor.

An Assistant-Commissioner of Immigration for Florida will be found in the Office of the Florida Improvement Company, at 62 Broadway, Room 15, New York, of whom books, pamphlets, maps, and all necessary information as to routes, time of starting and how to obtain reduced fares may be obtained.

J. S. ADAMS,

Commissioner.

END OF

TITLE